Sustainable Transportation Plan Advisory Committee

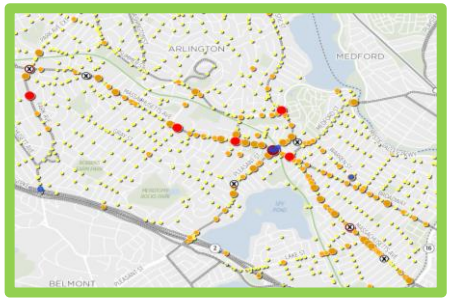
CONNECT Arlington SUSTAINABLE TRANSPORTATION PLAN

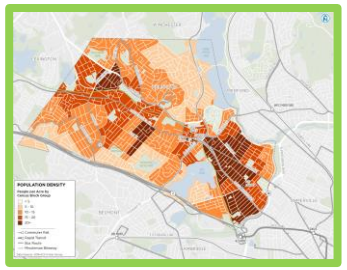
December 16, 2020

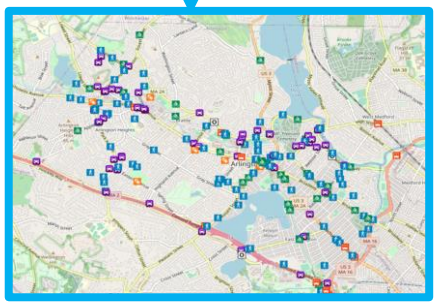
NELSON NYGAARD

WHERE ARE WE IN THE PROCESS?

Jan | Feb | Mar | Apr | May | June | Jul | Aug | Sep | Oct | Nov | Dec | Jan





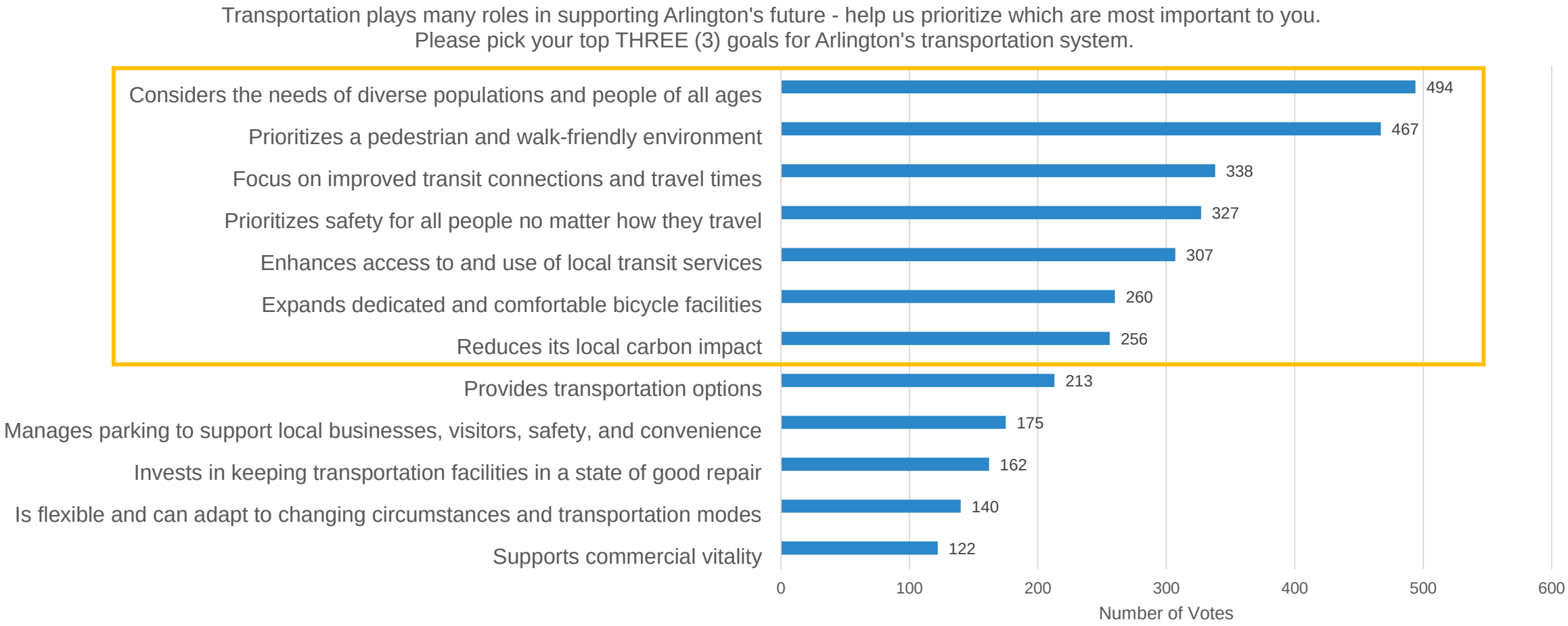


WE ARE HERE

zoom

Vision and Goals

VISION DEVELOPED WITH INPUT FROM PUBLIC



CONNECT ARLINGTON VISION AND GOALS

In 20 years, Arlington is a community that offers a transportation network that provides…

- **Safe facilities for all users,** no matter how they travel.
- **Mobility options that meet the needs of diverse populations** and people of all ages and abilities.
- **A pedestrian first, walk-friendly environment.**
- **A low-stress bicycle network** connecting people in all areas of Arlington on dedicated, comfortable facilities.
- **A transit rich environment** with more local and regional options, improved connections, reduced travel times and enhanced user comfort for all who live, work and visit Arlington.
- **A system that reduces the climate impacts from travel in Arlington** through sustainable roadway design and incentivizing reduction in drive-along trips.
- **Infrastructure and policies that support the local economy**, including efficient movement of goods and services.

A PARADIGM SHIFT IN HOW WE THINK ABOUT AND PLAN TRANSPORATION

- Pedestrian First
- Active Transportation Priority
- Moving More People More Efficiently
- Incorporating New Technologies
- Driving When Necessary

DRAFT STRATEGIES

PLAN GOALS TRANSLATE TO STRATEGIES

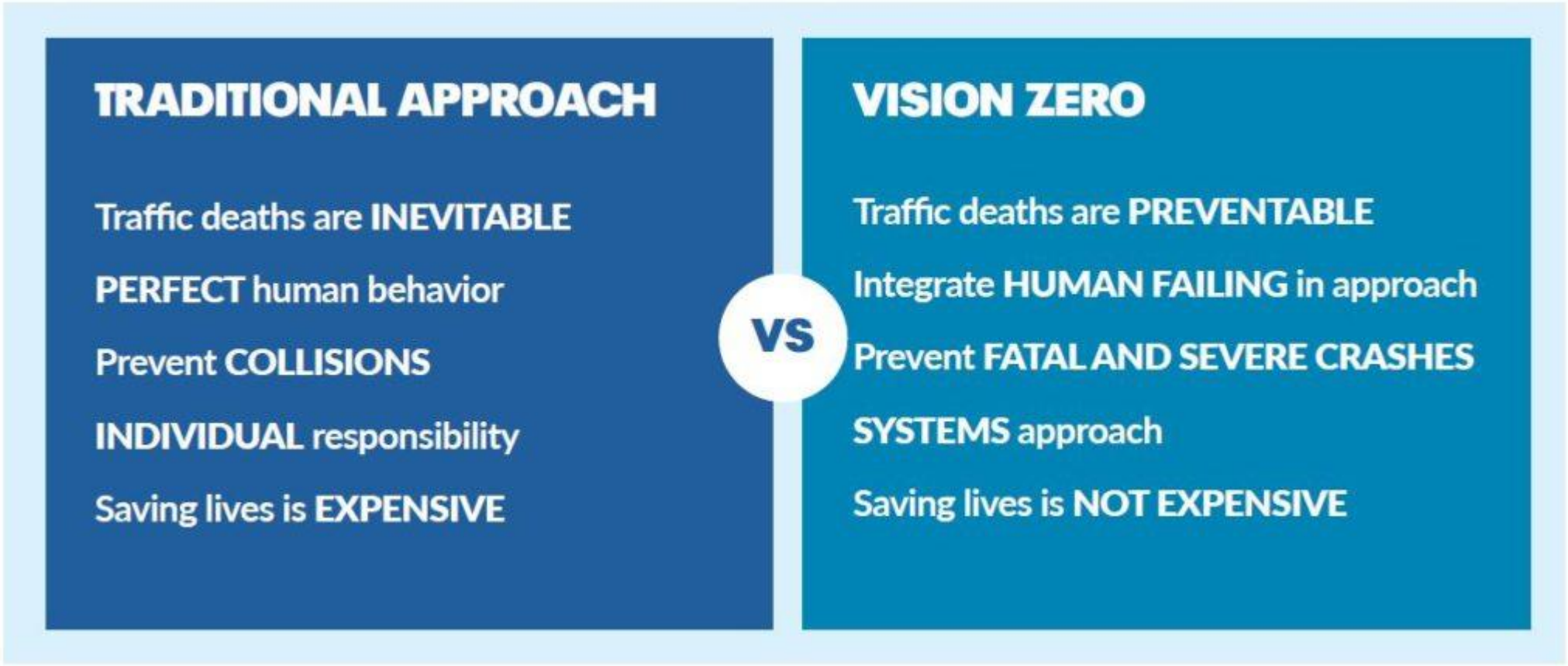
SAFE FACILITIES FOR ALL

Summary of Safe Facilities strategies

- Adopt a Vision Zero policy.
- Ensure all roadway design projects adhere to the Town's adopted Complete Streets policy.
- Prioritize investments to improve safety at intersections and along road segments with the greatest user conflicts.
- Develop educational programs that promote safe travel by ALL users.

SAFETY

STRATEGY: Adopt a Vision Zero policy.



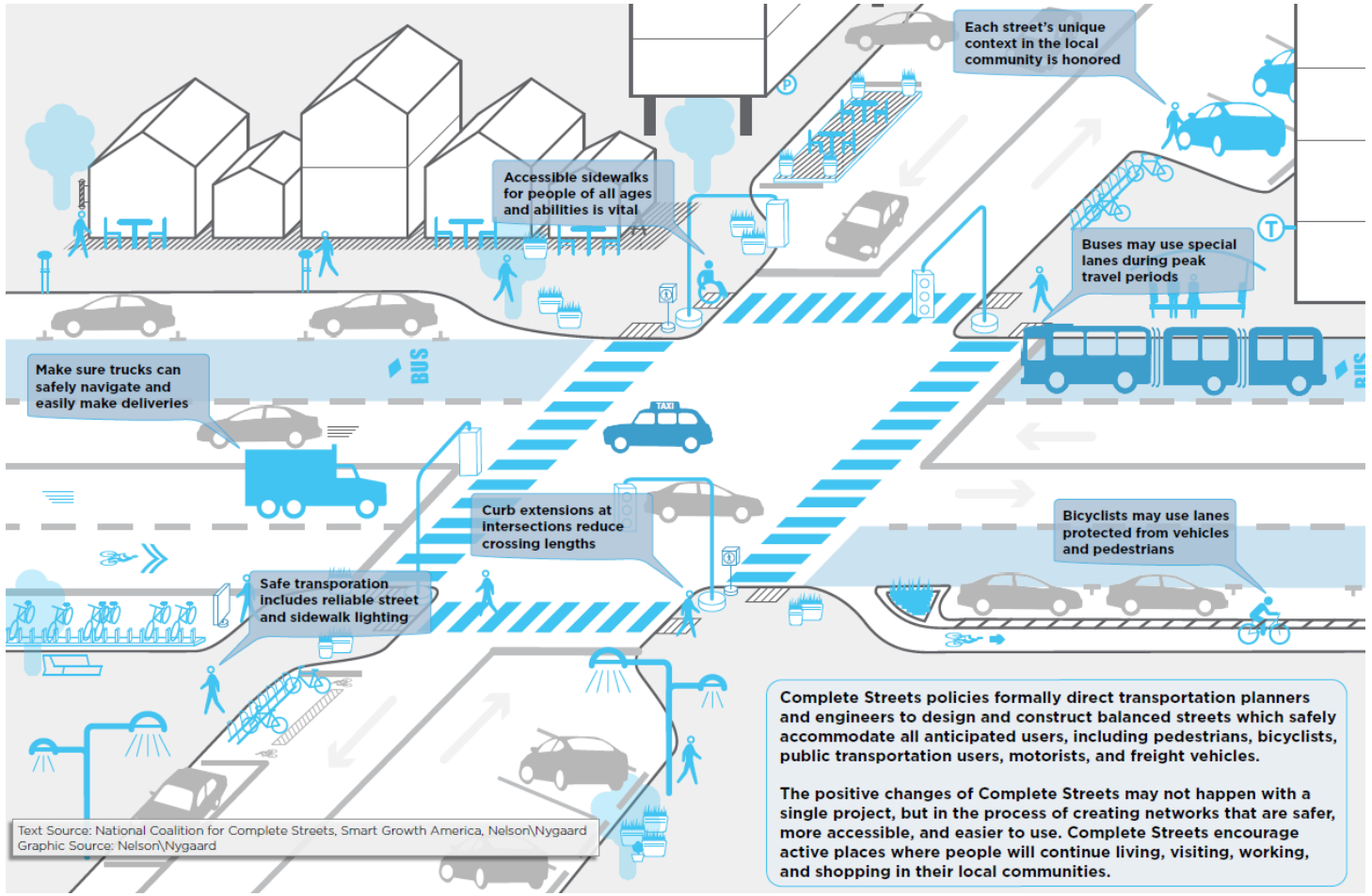
SAFETY

STRATEGY: Ensure all roadway design projects adhere to the Town's adopted Complete Streets policy.

Ensures all roadway design projects adhere to the Town's adopted Complete Streets policy.

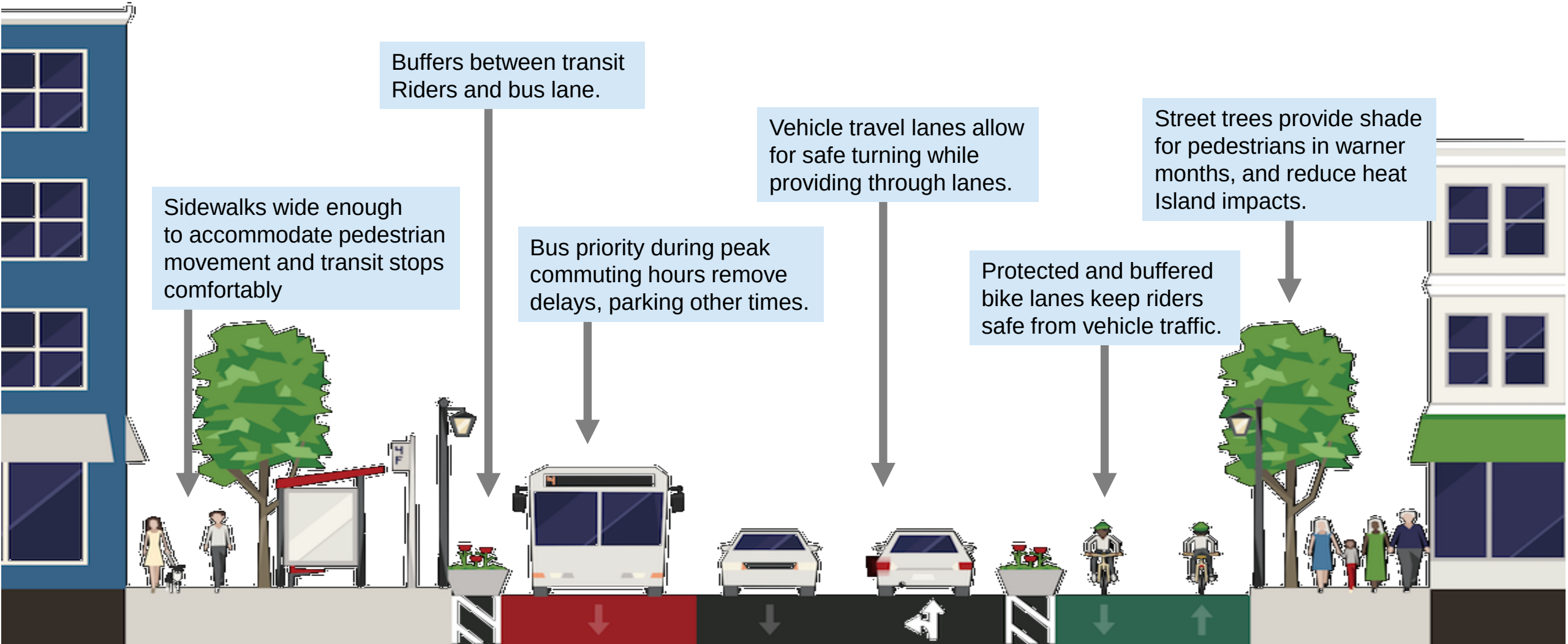
Prioritizes safety for all:

- Pedestrians
- Bicyclists
- Drivers
- Transit Riders



SAFETY

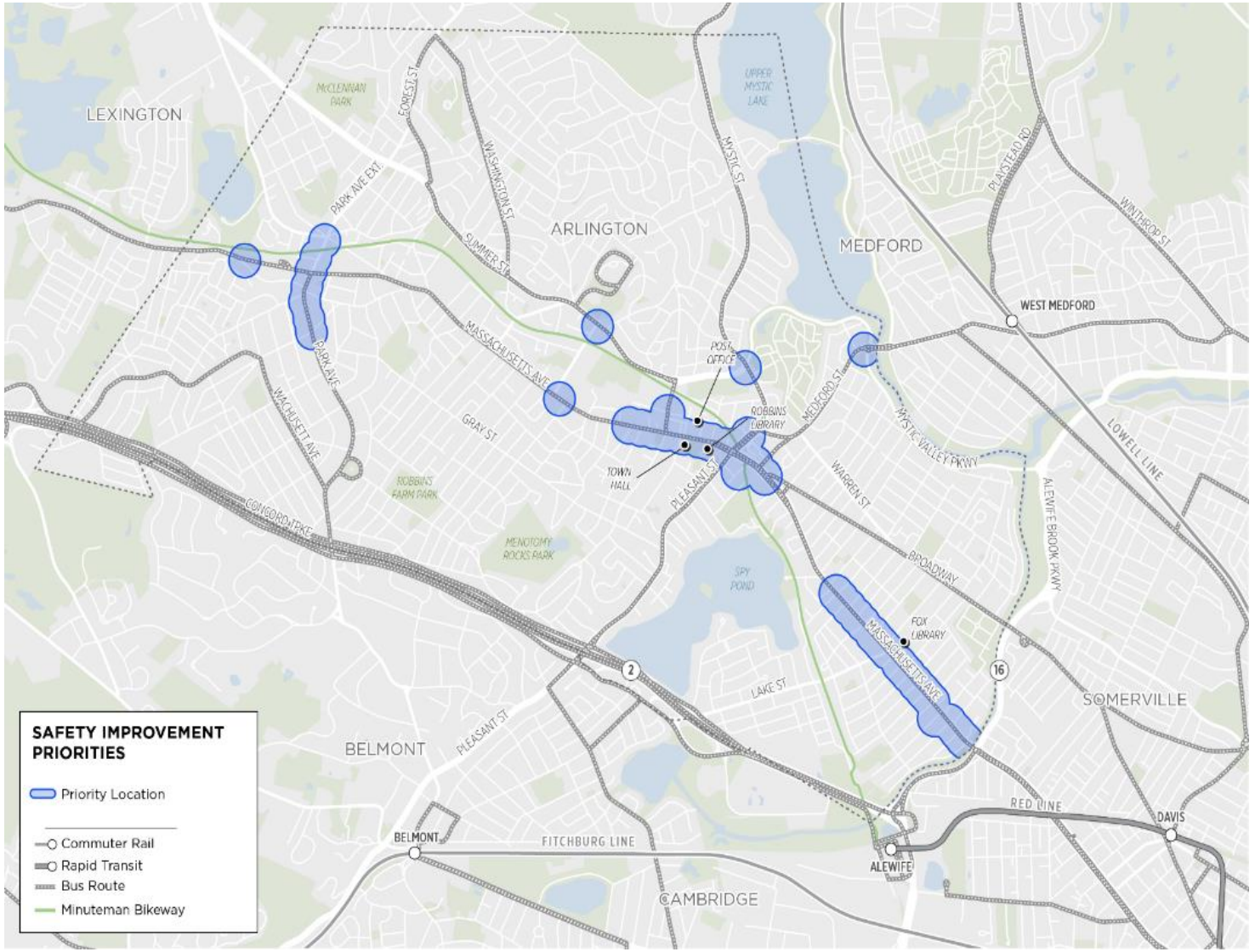
Complete Streets – Designing roads for all users makes them safer for all.



SAFETY

STRATEGY: Prioritize investments to improve safety at intersections and along road segments with the greatest user conflicts.

- Prioritize intersections where improvements have not yet occurred.
- Track safety data where improvements have occurred.



SAFETY

STRATEGY: Minimize pedestrian crossing distances to increase visibility at intersections where crashes involving pedestrians are highest.

SAFETY

STRATEGY: Enhance lighting at intersections and other crossings to focus on pedestrians.

SAFETY

STRATEGY: Develop educational programs that promote safe travel by ALL users.

Potential Example: Share the Path

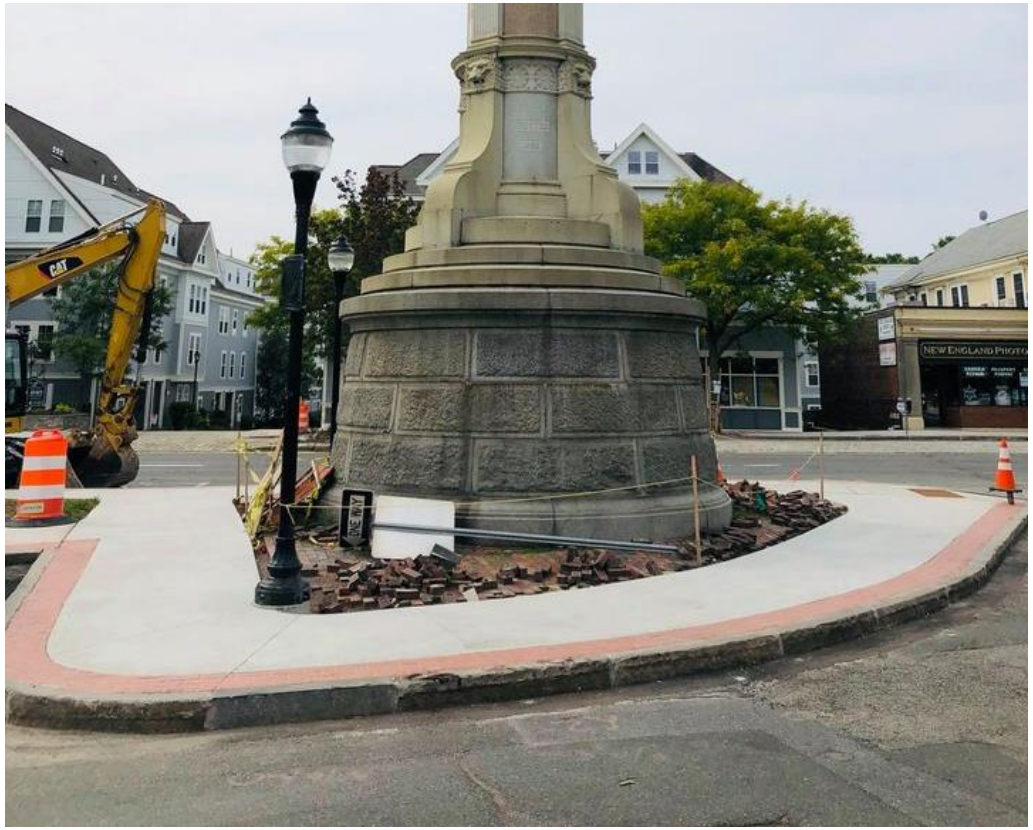
MOBILITY FOR ALL

Summary of Mobility for All strategies

- Continue to allocate funding to implement ADA improvements.
- Require all sidewalks to be constructed of materials that are accessible to all.
- Continue to develop and implement Safe Routes to School projects and programs.
- Explore opportunities to improve access to and increase capacity, safety on the Minuteman Bikeway.
- Increase car-share availability and membership in Arlington.
- Promote and expand bicycle share.
- Expand transit options to Arlington residents and workers through local shared transportation programs and services.

MOBILITY FOR ALL

STRATEGY: Continue to allocate funding to implement transportation improvement projects, including those identified in the Town's recently updated Americans with Disabilities Act (ADA) Transition Plan

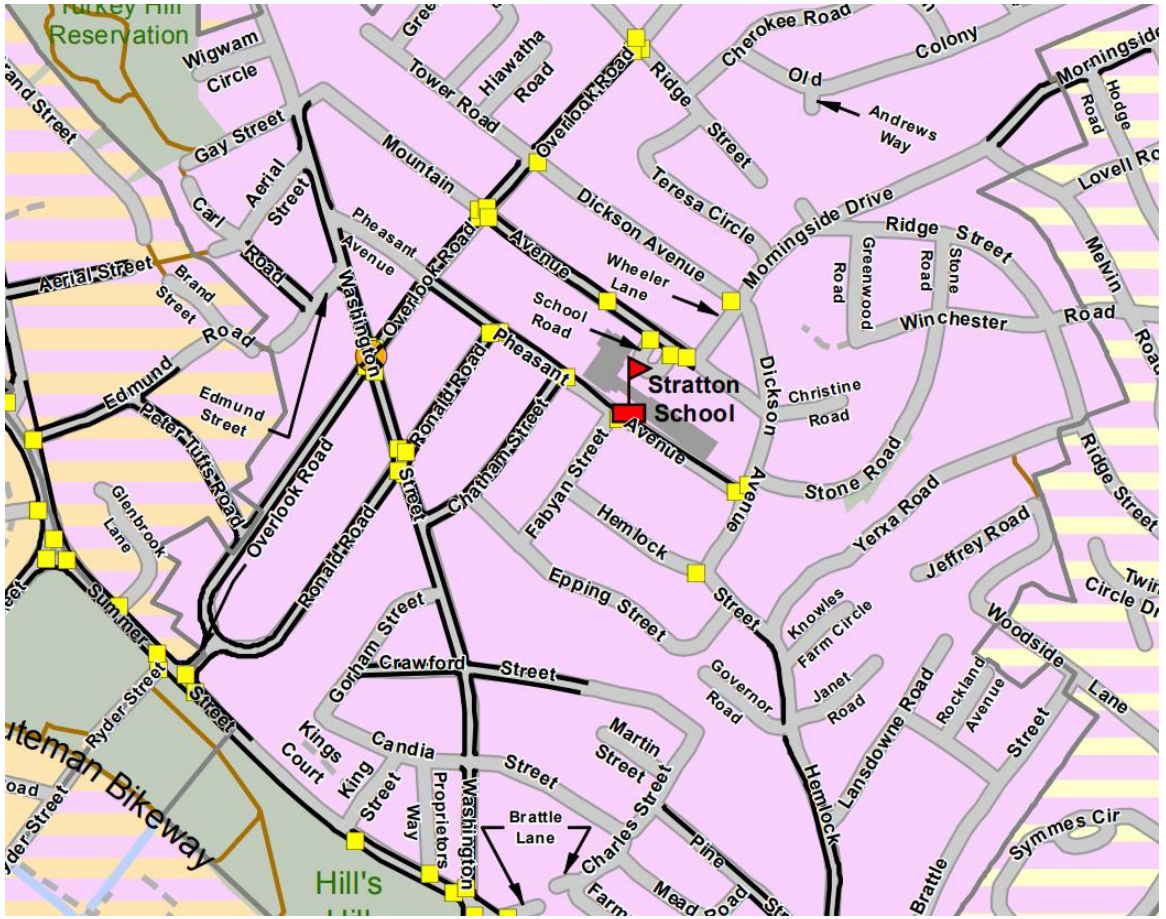


MOBILITY FOR ALL

STRATEGY: Require all sidewalks to be constructed with materials that are accessible to all.

MOBILITY FOR ALL

STRATEGY: Continue to develop and implement Safe Routes to School projects and programs.



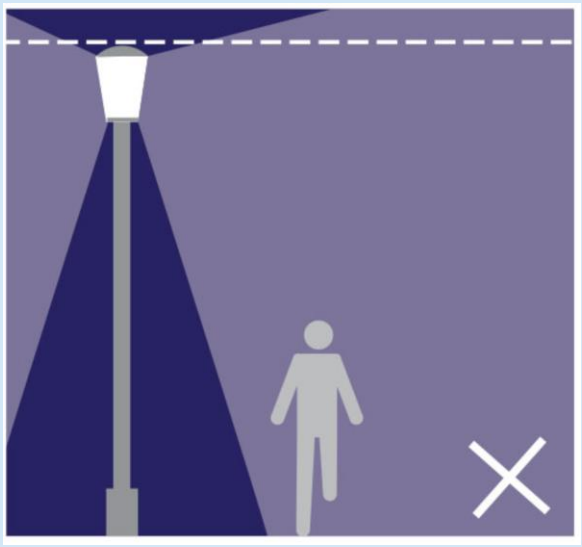
MOBILITY FOR ALL

STRATEGY: Explore opportunities to improve access to and increase capacity, safety on the Minuteman Bikeway.

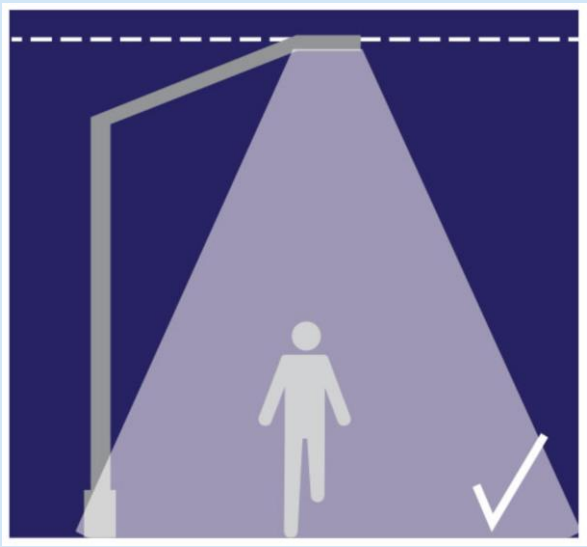
MOBILITY FOR ALL

STRATEGY: Prioritize opportunities to separate bicyclists from pedestrians to both expand capacity and enhance comfort and safety.

STRATEGY: Install lighting to increase visibility and safety during dark hours.



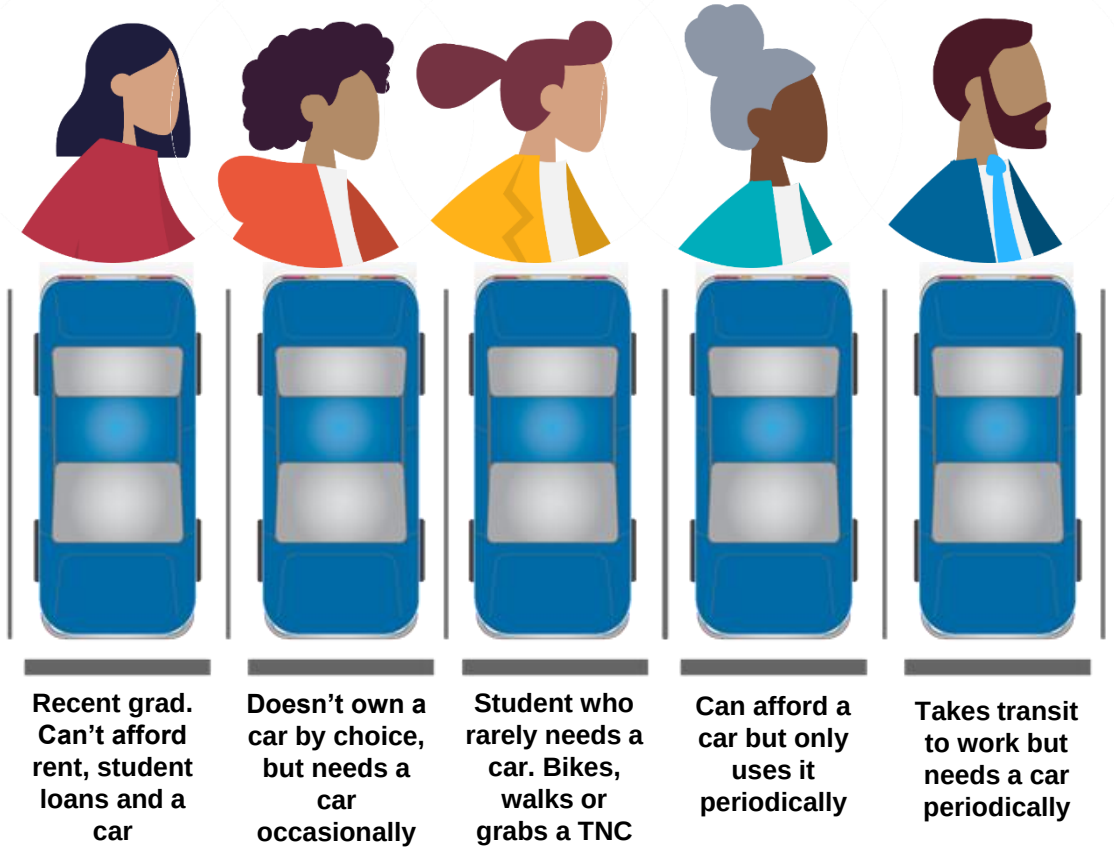
Non- Shielded Fixtures: Create light pollution affecting abutters.

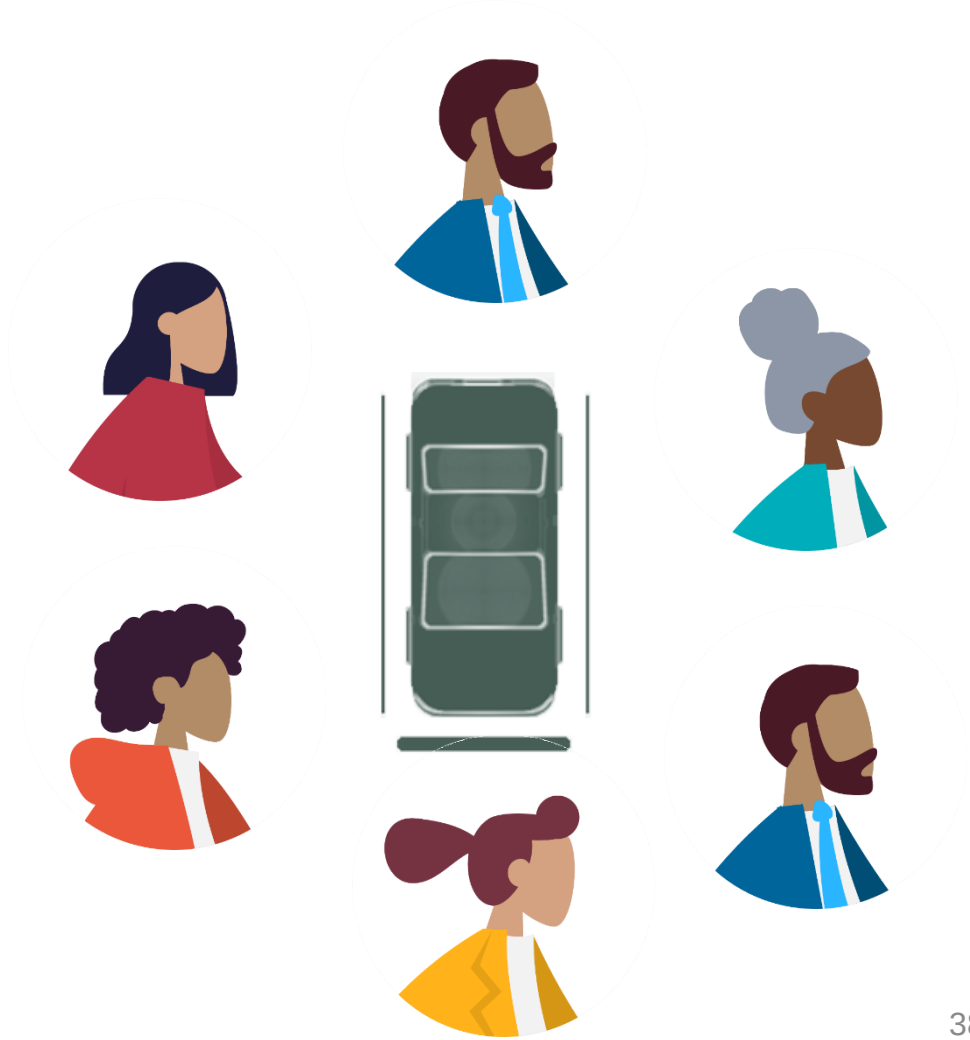


Full Cut-Off Fixtures: Direct light onto the path, not abutters property.

MOBILITY FOR ALL

STRATEGY: Increase car-share availability and membership in Arlington.

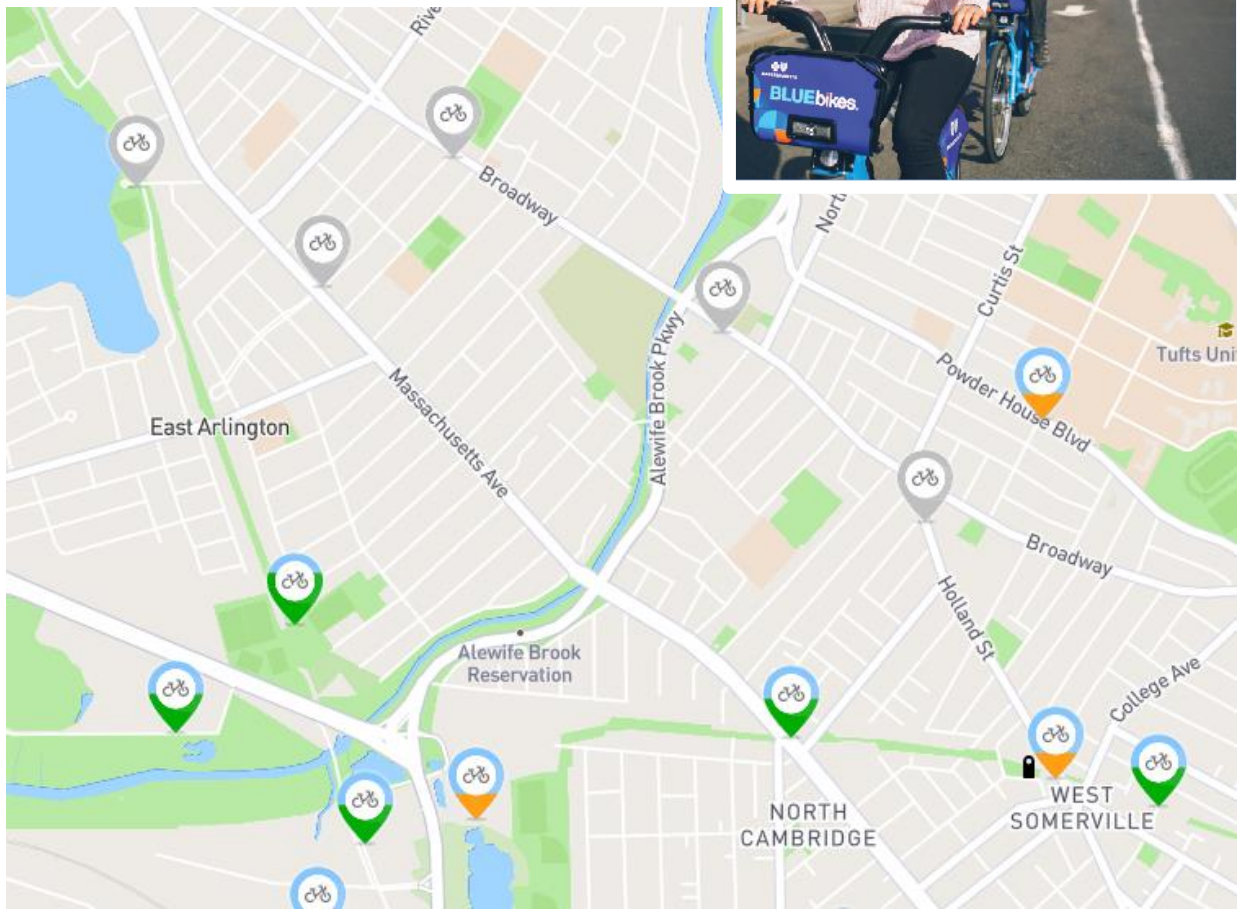




MOBILITY FOR ALL

STRATEGY: Promote and expand bicycle share.

- Advocate for full-year service at all stations in Arlington.
- Identify additional funding for more stations to increase access and convenience.
- Provide free or subsidized memberships to those in need.



MOBILITY FOR ALL

STRATEGY: Expand transportation options to Arlington residents and workers through local shared transportation programs and services.

STRATEGY: Continue to partner with local taxi service, or partner with TNCs (e.g. Uber and Lyft) to provide door-to-door connectivity, including subsidized rides to qualifying residents.

STRATEGY: Explore opportunities to launch a local transit service through contracting with a third-party micro-transit service.

A PEDESTRIAN FIRST, WALK-FRIENDLY ENVIRONMENT

Summary of Pedestrian First strategies

- Create and implement a sidewalk improvement program and communicate progress.
- Ensure all pedestrian facilities are fully accessible, ADA-compliant and maintained.
- Remove slip lanes to square intersections where feasible to improve pedestrian safety.
- Expand and maintain the existing street canopy to improve pedestrian safety and comfort.

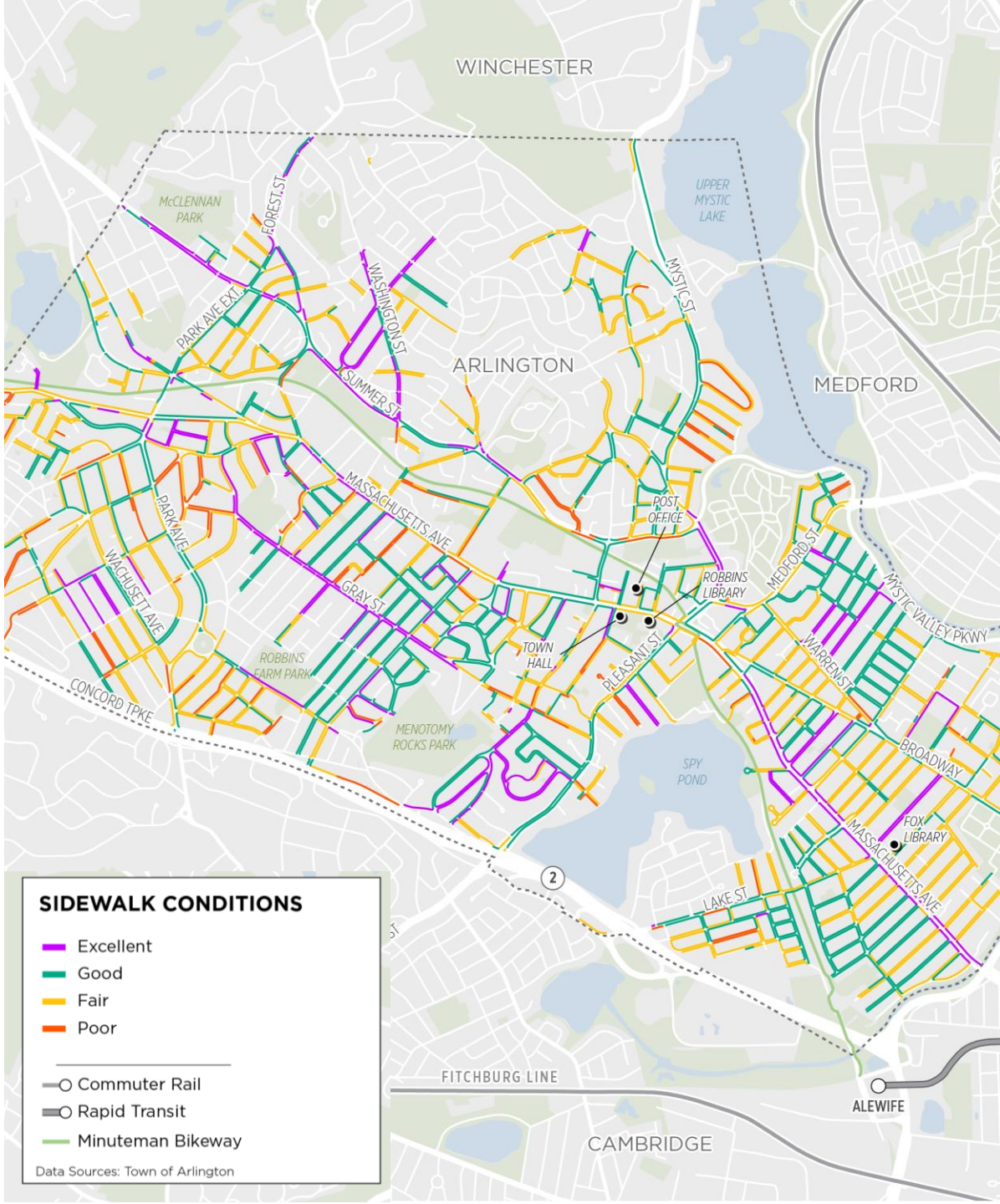
PEDESTRIAN FIRST

STRATEGY: Create and implement a sidewalk improvement program and communicate progress.

Sidewalk Program Status

Program	Improved	Improved
6	173	82,391
Years	Blocks	*Linear Feet

*Total sum of all improved blocks. Either entire block or sections of block have been improved.



PEDESTRIAN FIRST

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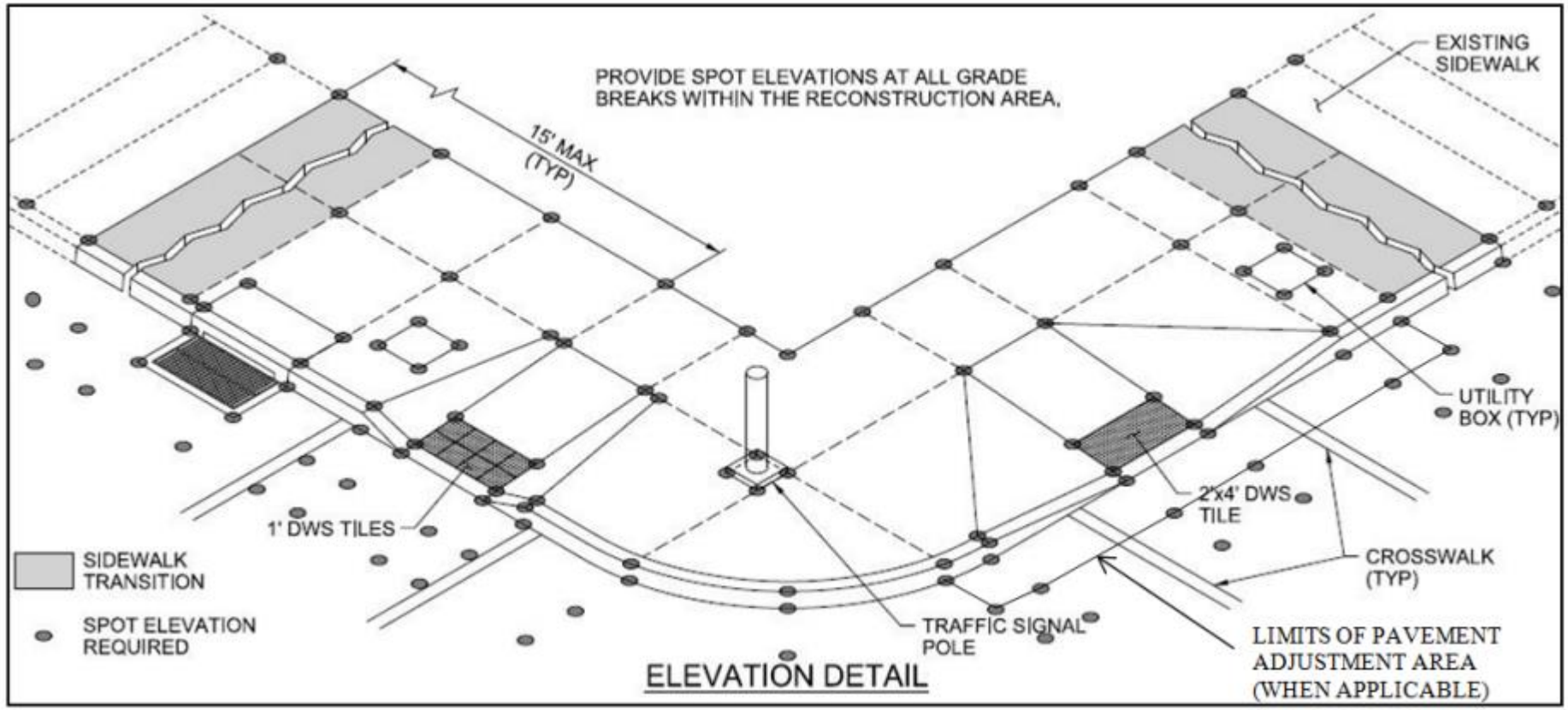
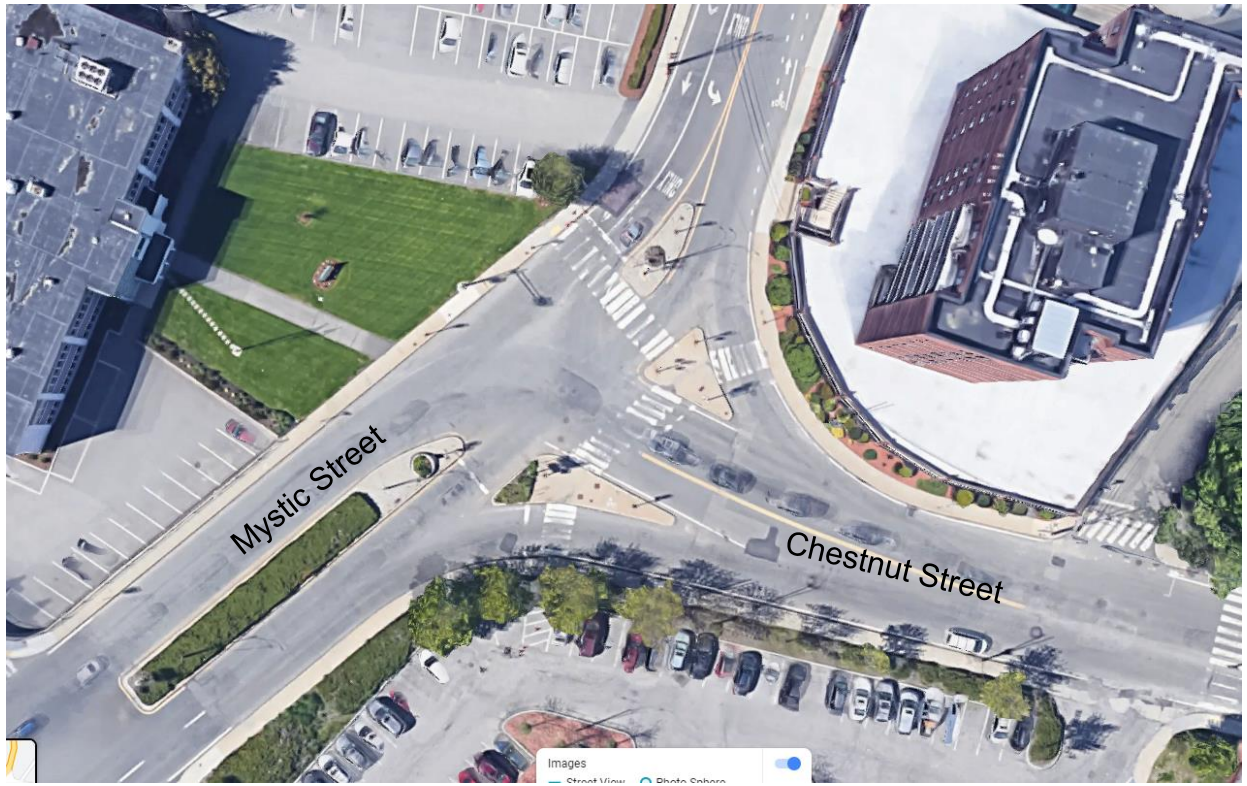


PEDESTRIAN FIRST

STRATEGY: Remove slip lanes to square intersections where feasible to improve pedestrian safety.

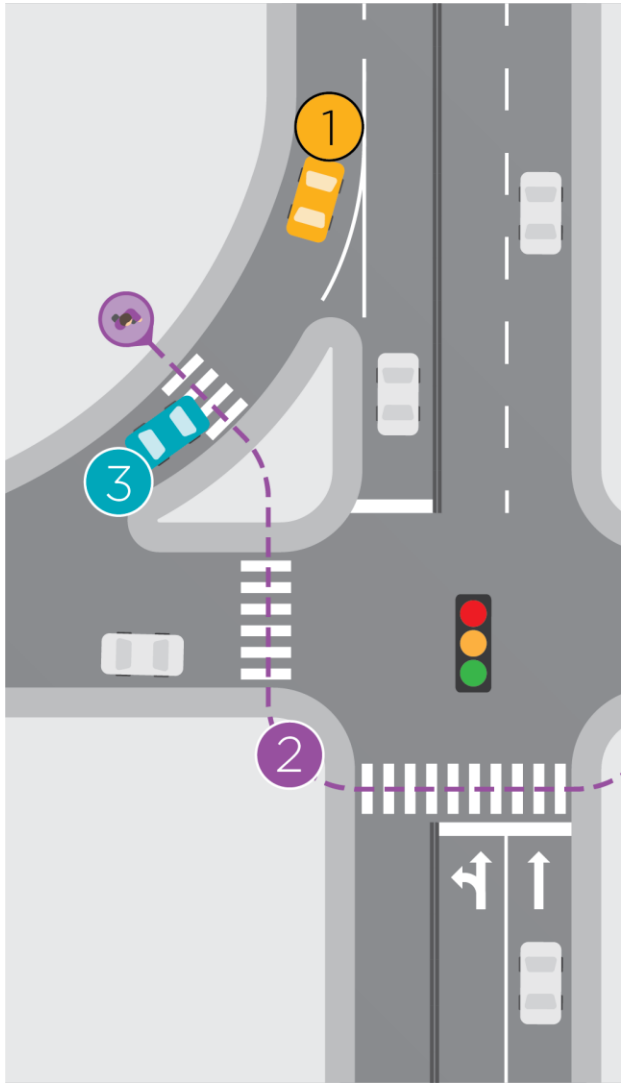


Slip lanes make walking dangerous because ....

1 ... they enable vehicles to drive and turn at higher speeds

2 ... they increase the number and length of road crossings required

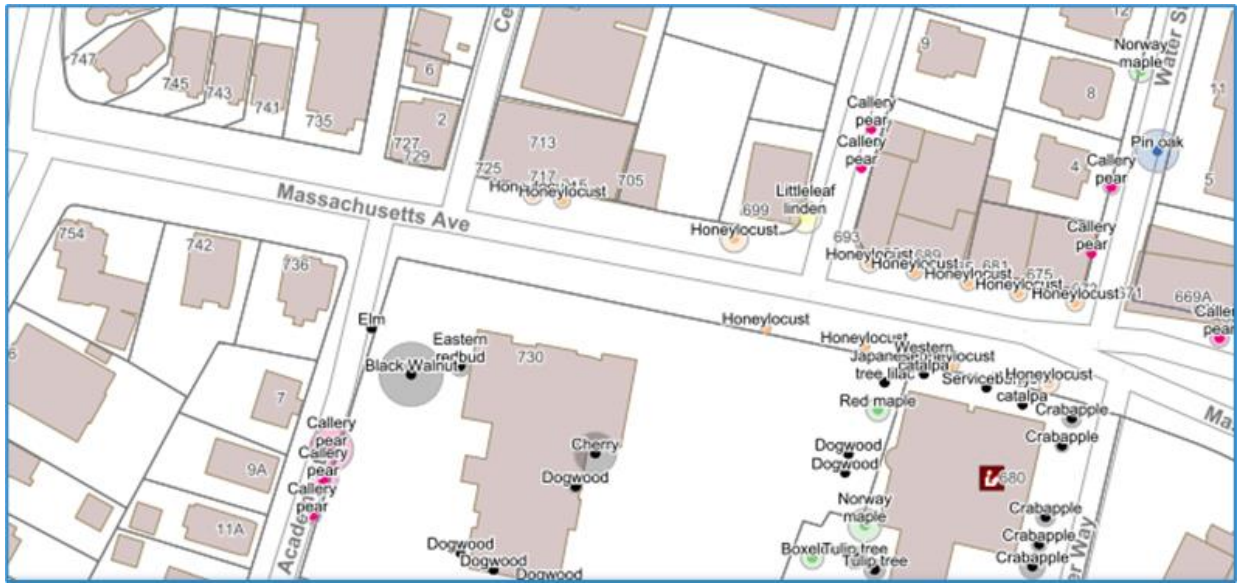
3 ... drivers don't automatically yield to people crossing when there is no other traffic control



PEDESTRIAN FIRST

STRATEGY: Expand and maintain the existing street canopy to improve pedestrian safety and comfort.

- Develop a street tree planting program and implement over time.
- Define policies and strategies to address sidewalk damage caused by roots to ensure sidewalks are accessible to all users, and free of tripping hazards.



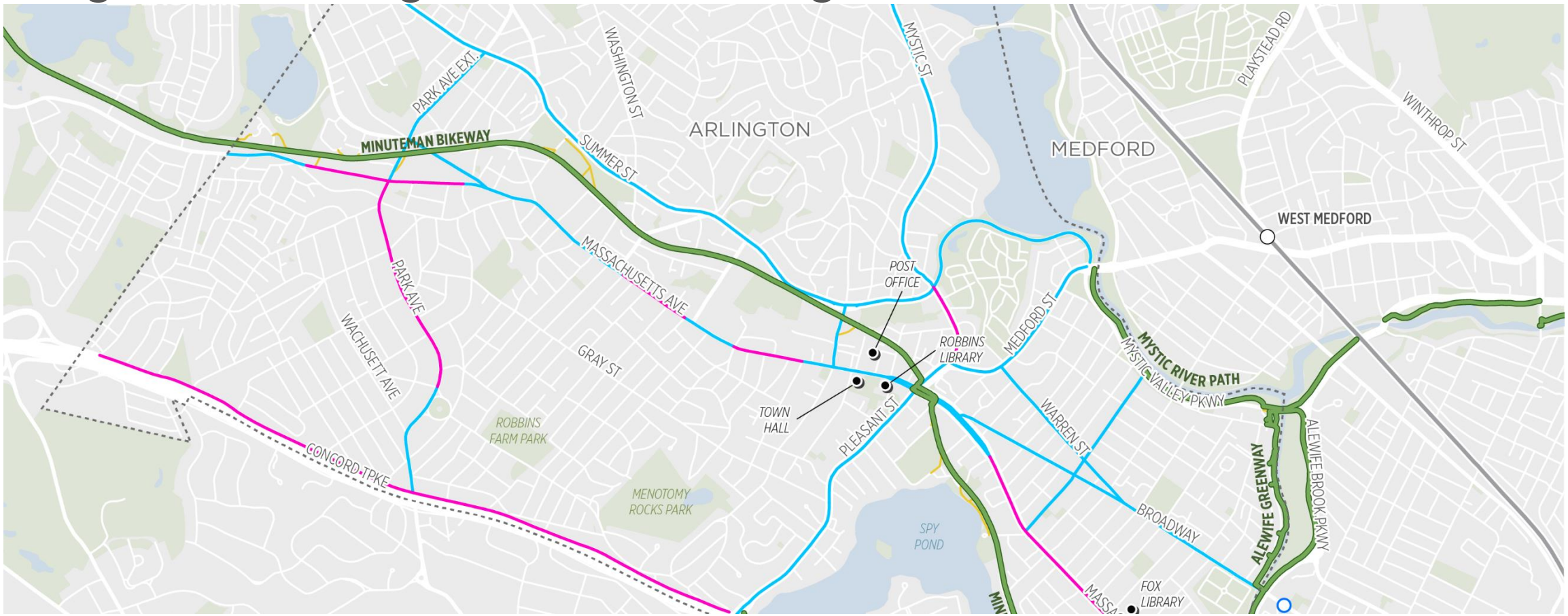
A LOW-STRESS BICYCLE ENVIRONMENT

Summary of Bicycle strategies

- Complete the bicycle lane network along all of Mass Ave.
- Prioritize new bicycle lanes connecting to existing bicycle facilities to build out a contiguous network.
- Prioritize bike lanes on corridors that serve schools and community facilities.
- Establish dedicated or preferred bike routes (“bike boulevards”) on roadways that connect to neighborhoods and schools.
- Add or upgrade bicycle parking along commercial corridors and at public facilities.

LOW-STRESS BICYCLING

STRATEGY: Prioritize new bicycle facilities along corridors currently designated as Arlington's "Lane Sharing Network."



LOW-STRESS BICYCLING

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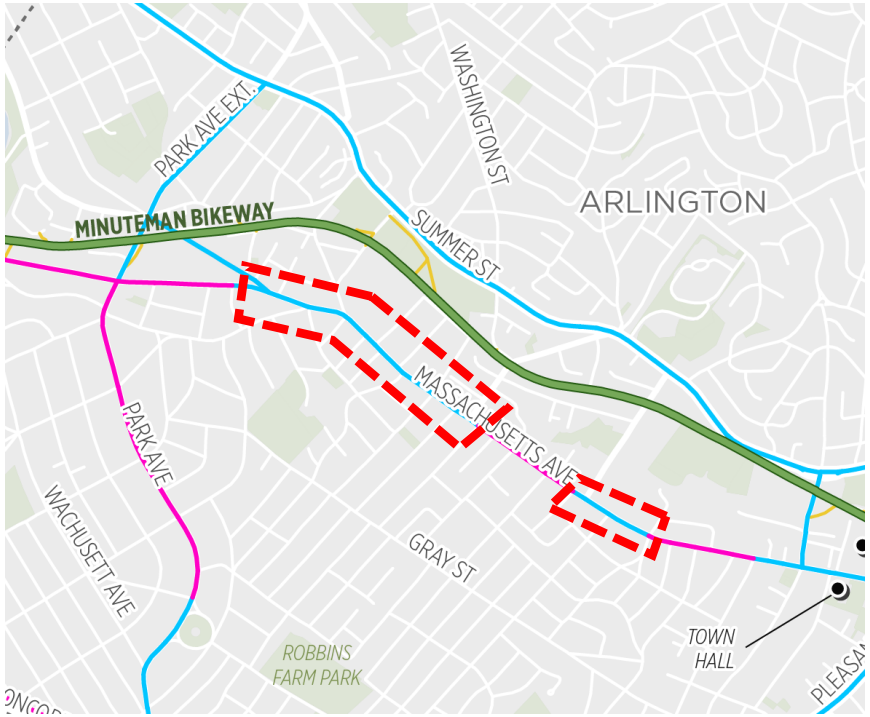
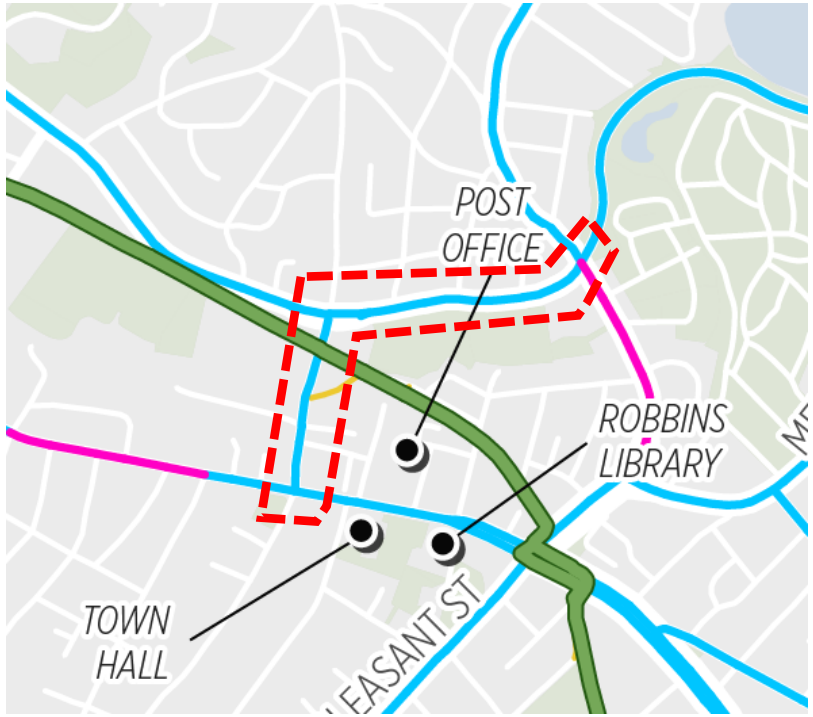


STRATEGY: Prioritize new bicycle lanes connecting to existing bicycle facilities to build out a contiguous network.



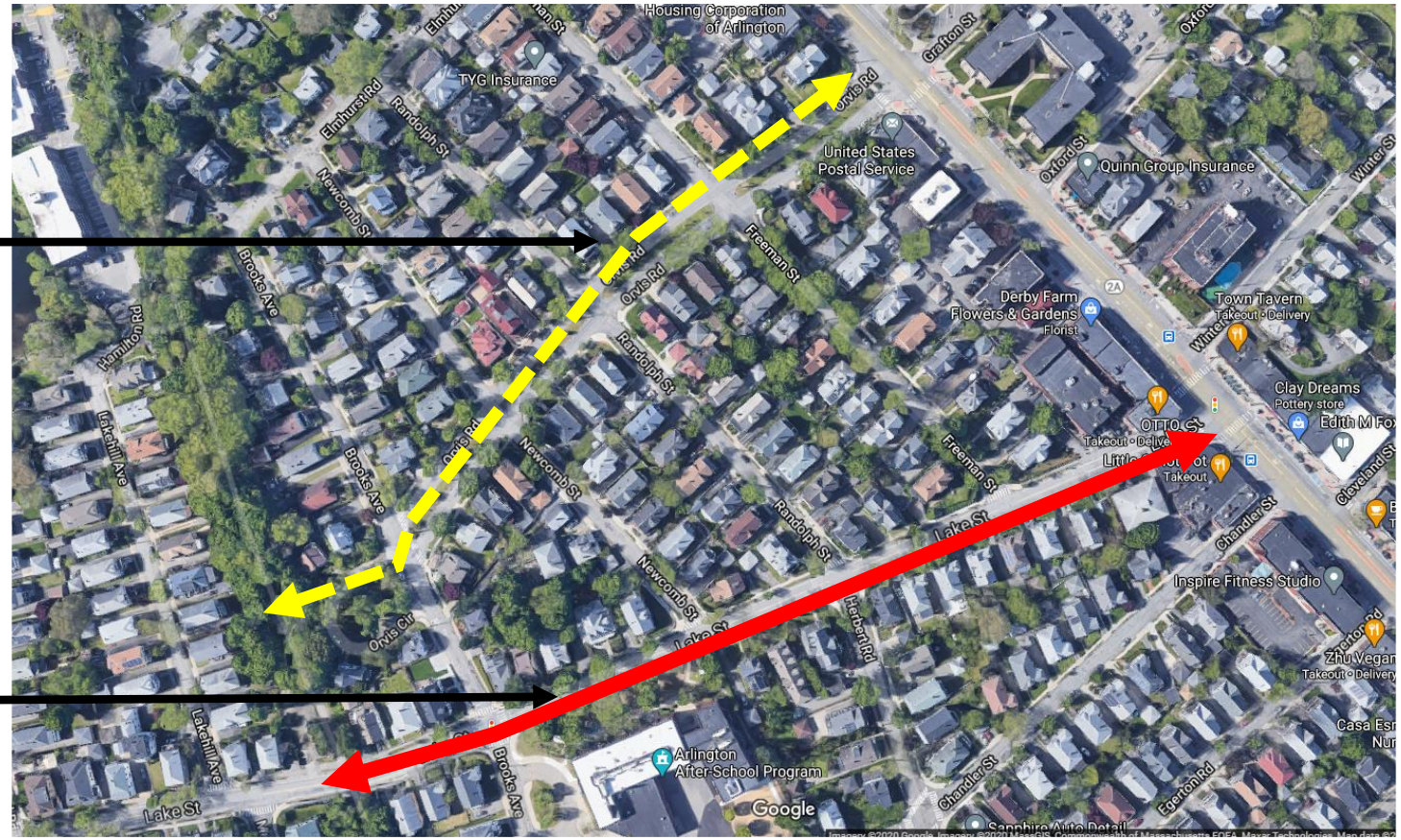
STRATEGY: Prioritize bike lanes on corridors that serve schools and community facilities.

LOW-STRESS BICYCLING

STRATEGY: Establish dedicated or preferred bike routes (“bike boulevards”) on roadways that connect to neighborhoods and/or schools.

Bike Boulevard – preferred route along Orvis Road and Circle connects Mass Ave and Minuteman Bikeway

Lake Street between Mass Ave and Minuteman Bikeway and new on-street lanes has limited ROW to accommodate bicycle lanes..



LOW-STRESS BICYCLING

STRATEGY: Add or upgrade bicycle parking along commercial corridors and at public facilities.

TRANSIT RICH ENVIRONMENT

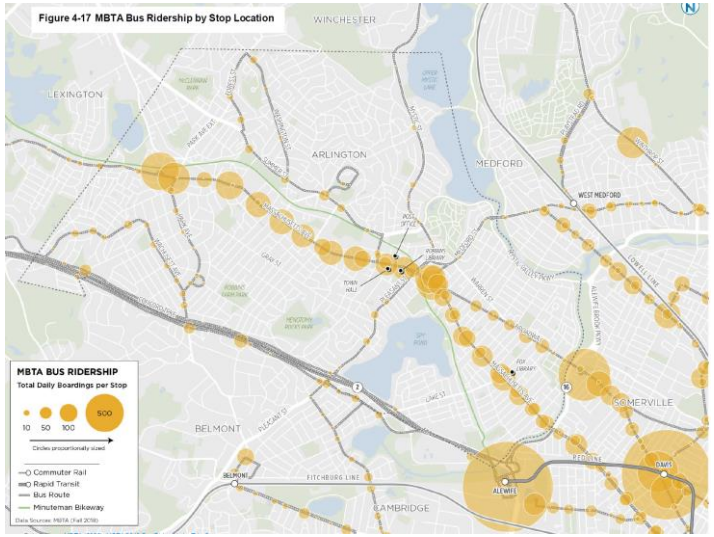
Summary of Transit strategies

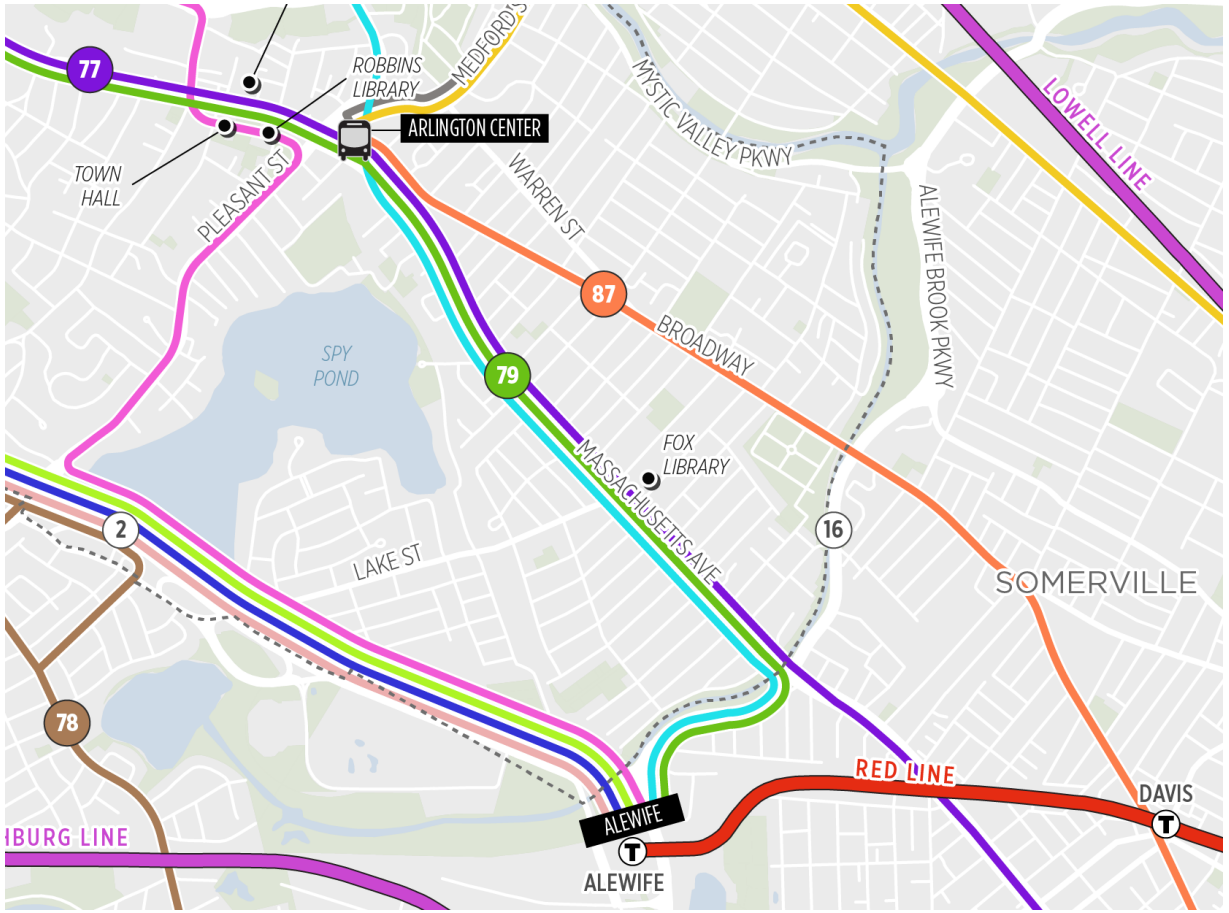
- Advocate for increased bus frequency to reduce crowding and provide greater comfort?
- Study potential for and implement more bus priority lanes to reduce transit trip times.
- Enhance the bus stop experience to provide greater comfort and increase convenience.
- Expand local transit options for Arlington residents and workers.

TRANSIT-RICH ENVIRONMENT

STRATEGY: (Advocate for) Increased bus frequency on highest ridership bus routes to reduce crowding and provide greater comfort.

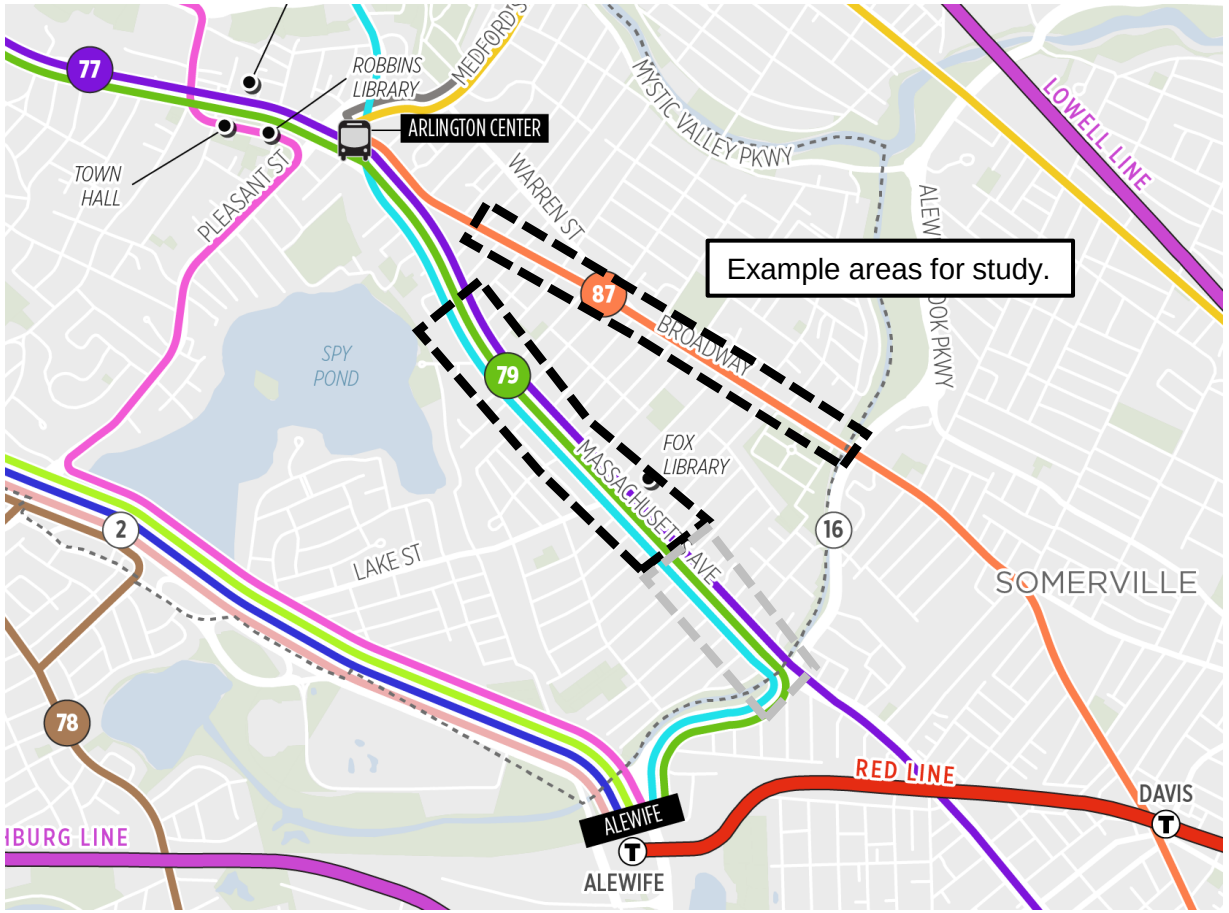
- **MBTA Route 77**: 7,600+ riders/day
- **MBTA Route 79**: 1,200+ riders/day
- **MBTA Route 350**: 1,600+ riders/day





TRANSIT-RICH ENVIRONMENT

STRATEGY: Study potential for and implement more bus priority lanes to reduce transit trip times.



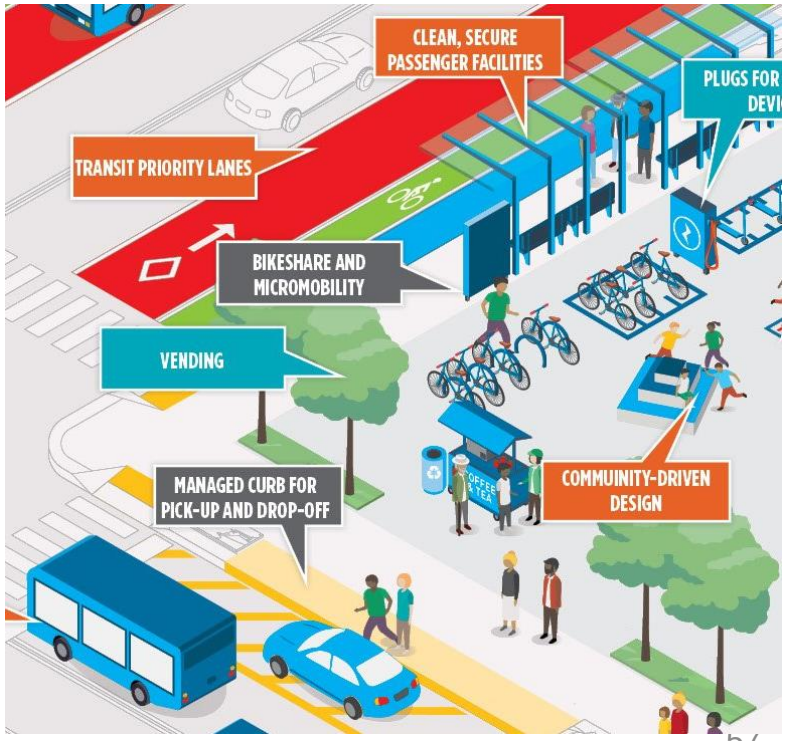
TRANSIT-RICH ENVIRONMENT

STRATEGY: Enhance the bus stop experience to provide greater comfort and increase convenience.

STRATEGY: Provide sufficient seating at or proximate to MBTA bus stops.

STRATEGY: Provide bike parking at or proximate to all bus stops.

STRATEGY: Design and implement micro-mobility hubs at bus stops.



TRANSIT-RICH ENVIRONMENT

STRATEGY: Expand local transit options for Arlington residents and workers.

STRATEGY: Explore opportunity to launch local transit service through contracting with a third-party micro-transit service.

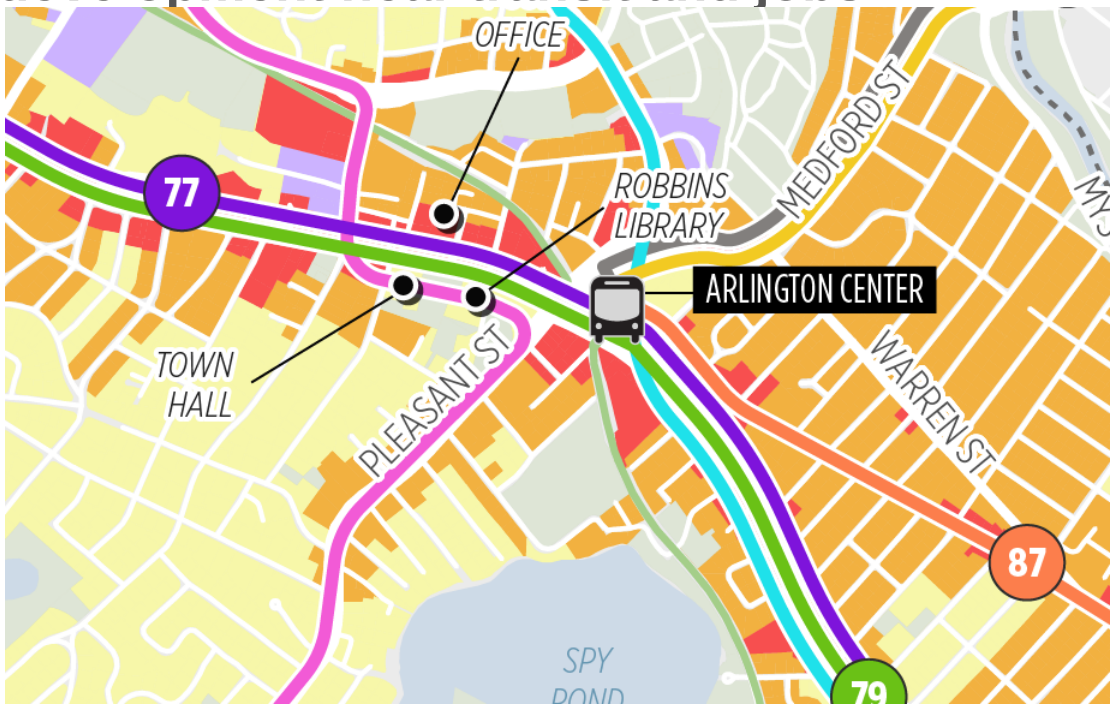
STRATEGY: Explore opportunities to partner with abutting communities to fund fixed-route services that enhance local connectivity

REDUCED CLIMATE IMPACTS FROM TRAVEL IN ARLINGTON

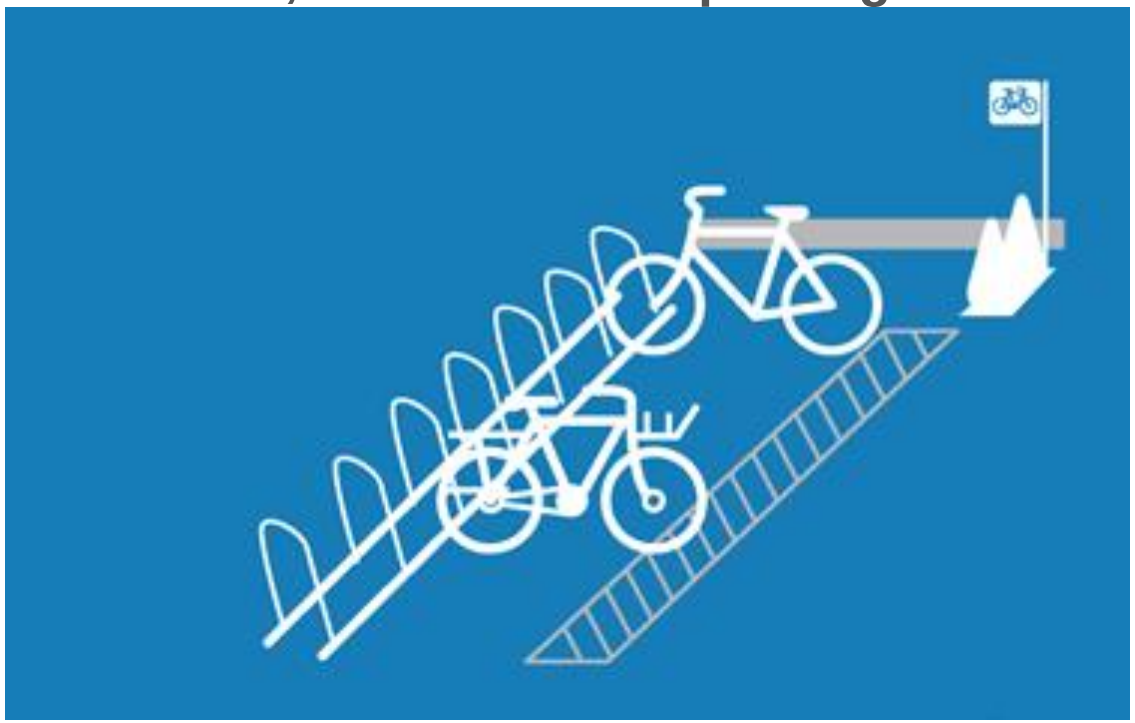
REDUCED CLIMATE IMPACTS FROM TRAVEL

STRATEGY: Manage travel demand to reduce single-occupancy vehicle trips and emissions.

STRATEGY: Continue to encourage and incentivize mixed-use, higher density development near transit and jobs.



STRATEGY: Consider zoning amendments that reduce the need to drive through parking maximums, increased bike parking.



REDUCED CLIMATE IMPACTS FROM TRAVEL

STRATEGY: Implement mobility recommendations included in the Town's Net Zero plan to reduce greenhouse gas emissions stemming from the transportation network and its users.

STRATEGY: Create and implement a plan to expand public electric vehicle charging at libraries, business districts, public parking and other facilities, both on- and off-street

STRATEGY: Adopt a zero-emissions municipal fleet and charging infrastructure plan and policy that commits to complete transition to zero emission vehicle purchases.

INFRASTRUCTUE AND POLICIES TO SUPPORT THE LOCAL ECONOMY AND RESIDENT QUALITY OF LIFE

Summary of Economy/Quality of Life strategies

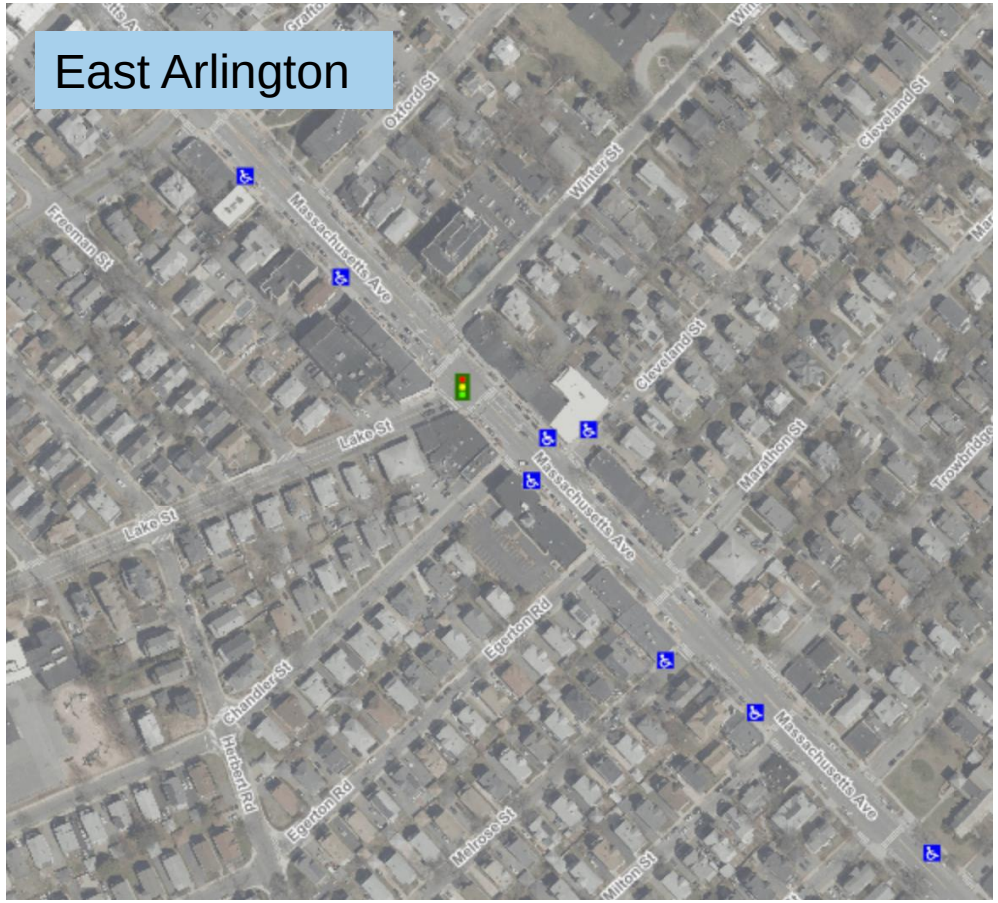
- Conduct additional studies to more efficiently manage parking along Mass Ave.
- Repurpose parking spaces for pick-up and drop off activity?
- Dedicate more areas for commercial delivery to reduce double parking?
- Repurpose on-street parking areas for other uses – transit priority, bicycle lanes?

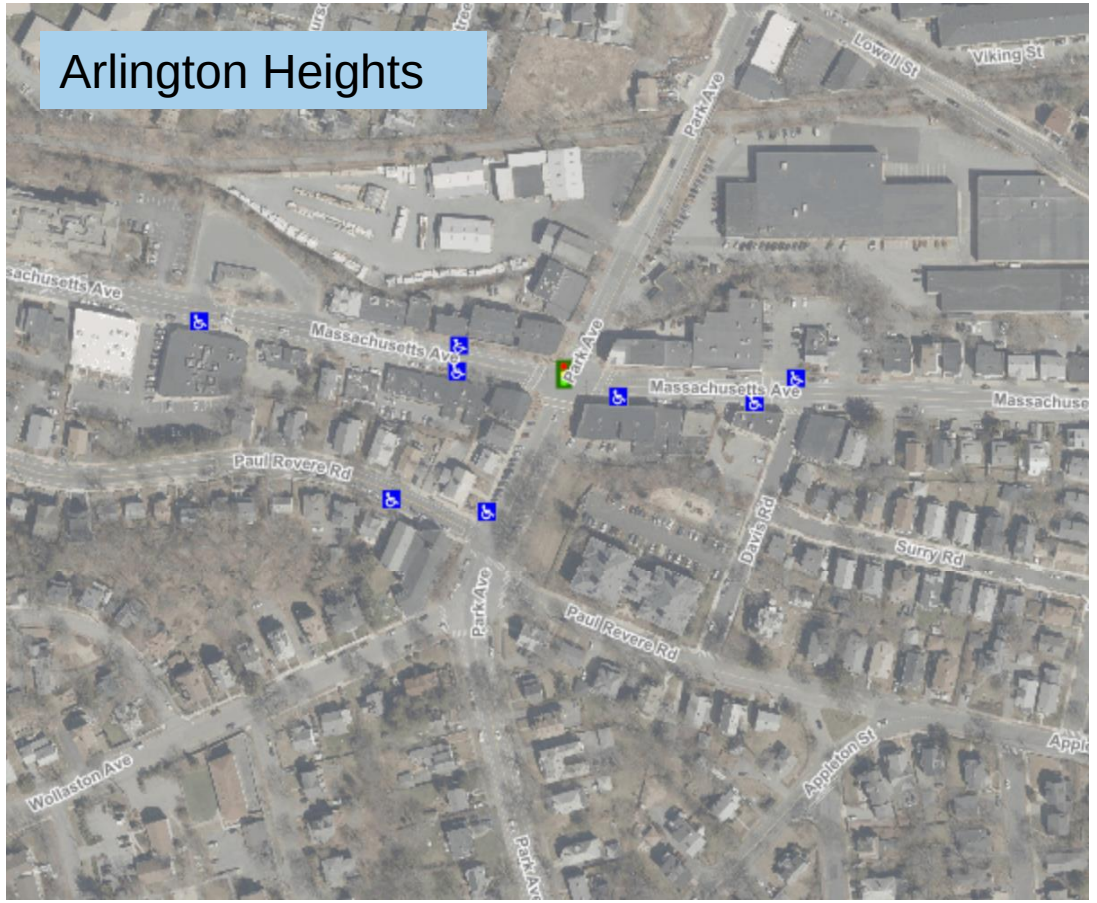
SUPPORT THE LOCAL ECONOMY

STRATEGY: Consider changes to parking regulations and policies that more effectively manage public on- and off-street parking throughout Arlington.

SUPPORT THE LOCAL ECONOMY

STRATEGY: Allocate funding to study parking along all of Mass Ave with an emphasis on Capitol Square/East Arlington and Arlington Heights.





SUPPORT THE LOCAL ECONOMY

STRATEGY: Rethink the curb and design it to support competing users and needs more effectively.

Because the curb is ...

... a major asset	...multi-purpose
The curb is one of our largest public resources	The curb has a growing number of demands

SUPPORT THE LOCAL ECONOMY

STRATEGY: Identify locations for dedicated curbside zones for pick-up and drop-off activity

STRATEGY: Designate additional locations to accommodate increased service and delivery needs.

STRATEGY: Repurpose on-street parking where possible to prioritize other modes including bus and bicycle

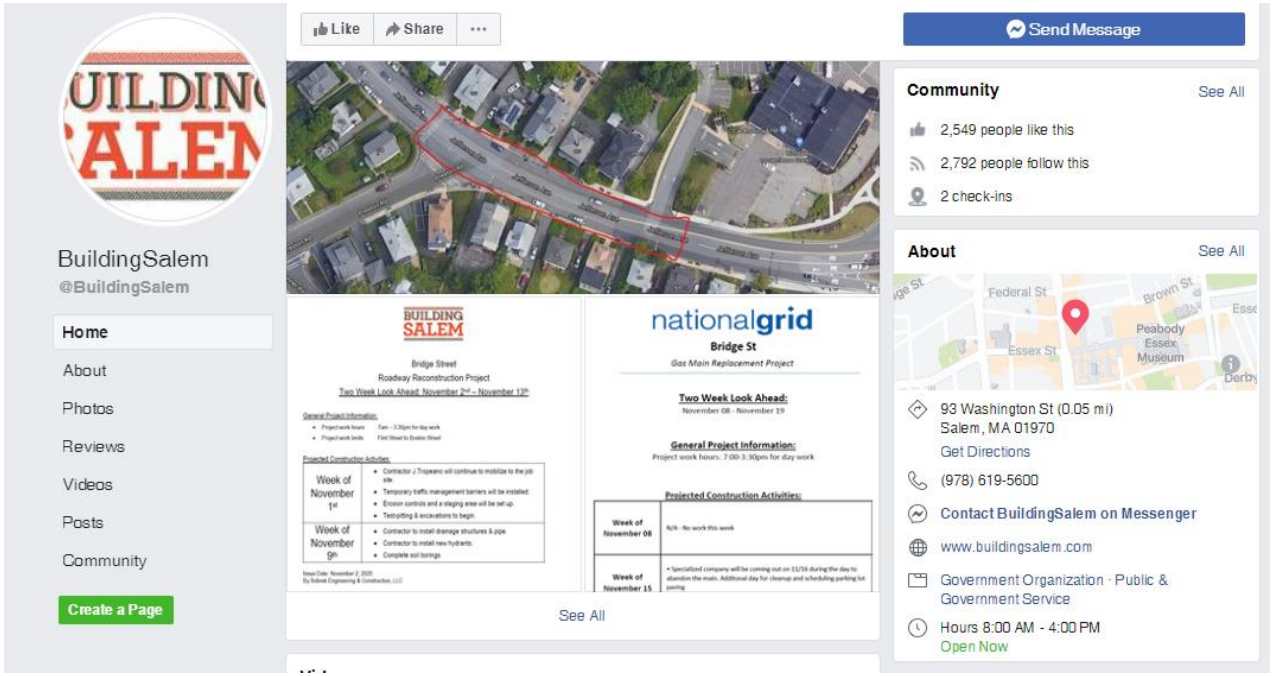
RESPONSIVE AND TRANSPARENT TRANSPORTATION DECISION-MAKING

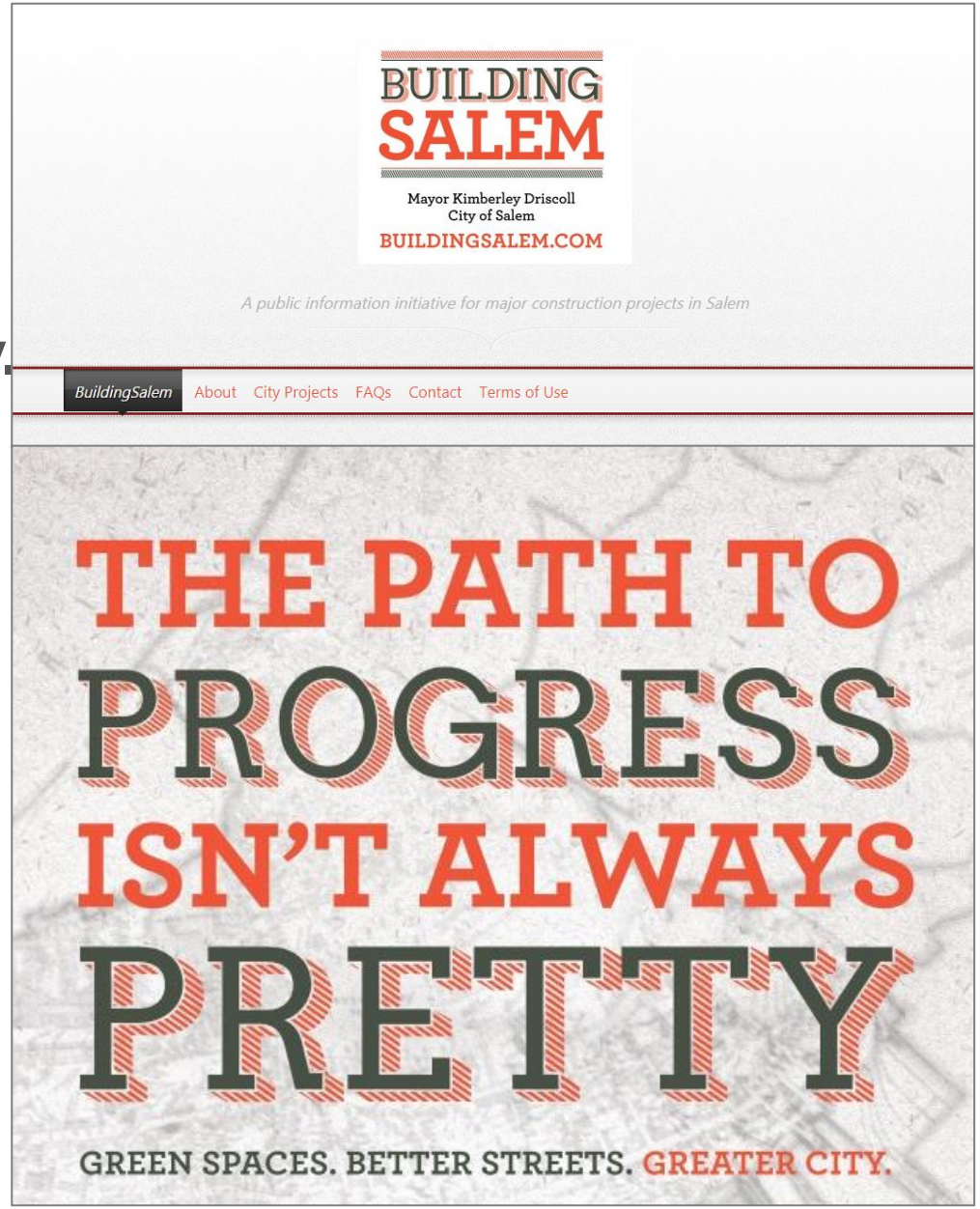
Summary of Responsiveness and Transparency strategies

- More effectively communicate transportation project updates, construction impacts and other service issues proactively.
- Developing and regularly updating a Local Transportation Improvement Program (LTIP)
- Implement tactical projects rapidly to address safety concerns.
- Develop and implement a Neighborhood Traffic Calming Program to address safety concerns.

RESPONSIVENESS AND TRANSPARENCY

STRATEGY: Effectively communicate transportation project updates, construction impacts and other service issues proactively.





RESPONSIVENESS AND TRANSPARENCY

Develop and regularly update a Local Transportation Improvement Program (LTIP)

STIP Investments Report

STIP: 2021 - 2025 (D)

Year	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Adjusted TFPC	Total Programmed Funds	Federal Funds	Non Federal Funds	MPO Project Score	PSAC Score	Earmark Details	Proponent	Other Information
2024	608778	Central Mass	Southbridge	SOUTHBRIDGE- INTERSECTION IMPROVEMENTS AT CENTRAL STREET, FOSTER STREET, HOOK STREET AND HAMILTON STREET	3	HSIP	$4,582,437	$916,488	$824,839	$91,649	14	62.5		Southbridge	Construction, CMAQ + HSIP + STBG Total Project Cost = $4,582,437, Design Status = 25%, YOE = 12%
2024	608778	Central Mass	Southbridge	SOUTHBRIDGE- INTERSECTION IMPROVEMENTS AT CENTRAL STREET, FOSTER STREET, HOOK STREET AND HAMILTON STREET	3	STBG	$4,582,437	$1,832,975	$1,466,380	$366,595	14	62.5		Southbridge	Construction, CMAQ + HSIP + STBG Total Project Cost = $4,582,437, Design Status = 25%, YOE = 12%
2024	609253	Boston Region	Wilmington	WILMINGTON- INTERSECTION IMPROVEMENTS AT LOWELL STREET (ROUTE 129) AND WOBURN STREET	4	CMAQ	$5,063,392	$3,400,000	$2,720,000	$680,000	53	59.5		Wilmington	Construction; CMAQ+HSIP Total Cost = $5,063,392; MPO Evaluation Score = 53
2024	609253	Boston Region	Wilmington	WILMINGTON- INTERSECTION IMPROVEMENTS AT LOWELL STREET (ROUTE 129) AND WOBURN STREET	4	HSIP	$5,063,392	$1,663,392	$1,497,053	$166,339	53	59.5		Wilmington	Construction; CMAQ+HSIP Total Cost = $5,063,392; MPO Evaluation Score = 53
Bicycle and Pedestrian								$8,514,072	$6,811,258	$1,702,814					
2024	607825	Southeastern Mass	Wareham	WAREHAM- CONSTRUCTION OF BIKE LANES ALONG NARROWS ROAD AND A SHARED USE PATH ADJACENT TO MINOT AVENUE INCLUDING RELATED WORK	5	CMAQ	$5,145,392	$5,145,392	$4,116,314	$1,029,078	43	38.5		Wareham	a) Construction; b) Total Cost = $5,145,392 - CMAQ d) EC Score 43 of 100; h) Project Proponent - Wareham; i) Status Pre 25%; TAP Eligible, Anticipating CMAQ Eligibility
2024	609211	Boston Region	Peabody	PEABODY- INDEPENDENCE GREENWAY EXTENSION	4	CMAQ	$3,368,680	$1,972,500	$1,578,000	$394,500	34	37		Peabody	Construction; CMAQ+TAP Total Cost = $3,368,680; MPO Evaluation Score = 34; TAP
2024	609211	Boston Region	Peabody	PEABODY- INDEPENDENCE GREENWAY EXTENSION	4	TAP	$3,368,680	$1,396,180	$1,116,944	$279,236	34	37		Peabody	Construction; CMAQ+TAP Total Cost = $3,368,680; MPO Evaluation Score = 34; TAP
Transit Grant Program								$2,000,000	$1,600,000	$400,000					
2024	S10782	Boston Region		COMMUNITY CONNECTIONS PROGRAM		CMAQ	$8,320,000	$2,000,000	$1,600,000	$400,000	N/A			Regionwide	Planning, Design, or Construction; Set Aside for
Roadway Improvements								$10,388,407	$8,310,726	$2,077,681					
2024	609035	Northern Middlesex	Westford	WESTFORD- REHABILITATION OF BOSTON ROAD	3	CMAQ	$9,591,597	$4,000,000	$3,200,000	$800,000	7.55			Westford	
2024	609035	Northern Middlesex	Westford	WESTFORD- REHABILITATION OF BOSTON ROAD	3	STBG	$9,591,597	$5,309,688	$4,247,750	$1,061,938	7.55			Westford	
2024	609035	Northern Middlesex	Westford	WESTFORD- REHABILITATION OF BOSTON ROAD	3	TAP	$9,591,597	$281,909	$225,527	$56,382	7.55			Westford	
2024	609459	Martha's Vineyard	Tisbury	TISBURY- DRAINAGE IMPROVEMENTS ON STATE HIGHWAY	5	STBG	$1,131,077	$796,810	$637,448	$159,362					AC Years 1-2 (FFY 2024-2025); Total project cost: $1,131,077. D5 waiting for final report
ADA Retrofits								$4,284,246	$3,427,397	$856,849					
2024	610647	Southeastern Mass	Wareham	WAREHAM- CORRIDOR IMPROVEMENTS ON ROUTE 6 AT SWIFTS BEACH ROAD	5	STBG	$4,284,246	$4,284,246	$3,427,397	$856,849	47			MassDOT	a) Construction; b) Total Cost = $4,284,246 STBG; d) EC Score 47 of 100; i) Status Pre
Section 2A / State Prioritized Reliability Projects								$311,542,589	$253,698,440	$57,844,150					

RESPONSIVENESS AND TRANSPARENCY

STRATEGY: Test Before You Invest.

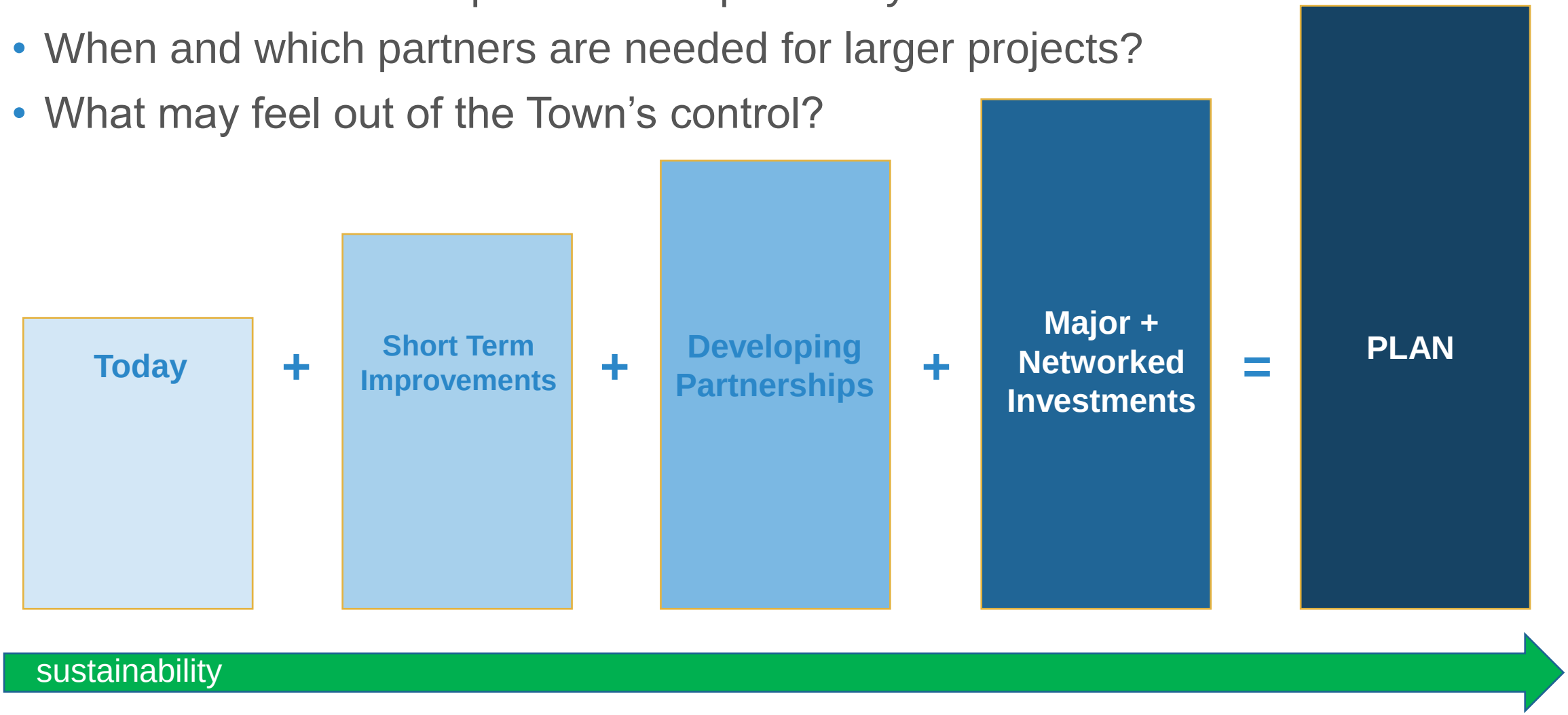
STRATEGY: Implement tactical projects rapidly to address safety concerns.

STRATEGY: Develop and implement a Neighborhood Traffic Calming Program to address safety concerns.

Wrap Up

FINAL STRATEGIES: FRAMEWORKS

- What the Town can implement independently.
- When and which partners are needed for larger projects?
- What may feel out of the Town's control?



FINAL ACTION PLAN
A road map that tracks progress

					
THE MEASURES Five primary metrics will measure progress toward each of the five values	**CRASHES** Counts and analysis of collisions to measure progress towards making safer travel	**TRAVEL TIME** Surveys of Newtonians' commutes and other trips to gauge the value of technological improvements to signals, buses, etc.	**TRIPS** Volumes of use of every mode to track shifts from driving to other modes	**NEIGHBORHOOD VITALITY** Regular surveys of Newtonians' satisfaction with the quality of their travels	**VEHICLE OWNERSHIP** Recording the amount of cars and miles traveled to track greenhouse gas reductions
THE BASELINE Where the city stands today:	1,451*	26 minutes†	73% Driving 13% Transit 4% Walking 1% Biking ‡	TBD	1.3 cars per household**
THE TARGETS:	0	<26 minutes	53% Driving 23% Transit 9% Walking 6% Biking	TBD	1 car per household